

THE CONCEPT OF INTENTIONAL ACTION  
IN THE GRAMMAR OF KATHMANDU  
NEWARI

by  
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Title: THE CONCEPT OF INTENTIONAL ACTION IN THE GRAMMAR OF

KATHMANDU NEWARI

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This study describes the relationship between the concept of intentional action and the grammatical organization of the clause in Kathmandu Newari, a Tibeto-Burman language spoken primarily in the Kathmandu valley of Nepal. In particular, the study focuses on the conceptual structure of "intentional action" along with the lexical, morphological, and syntactic reflexes of this notion in situated speech. The construal of intentional action consists of two distinct notions: one involving the concept of self-initiated force and the other involving mental representation or awareness. The distribution of finite inflectional forms for verbs results from the interaction of these two notions with a set of evidential/discourse principles which constrain the attribution of intentional action to certain discourse roles in situated interaction.

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## CHAPTER I

### INTRODUCTION

Consider what is entailed by our ability to talk about "events" in the world. First, it entails an ability to partition the world into events. In addition, it entails an ability to recognize and categorize the types of events and the types of roles participants play in events. Finally, it entails the ability to map these conceptual categories onto language specific lexical and grammatical categories. One goal of linguistic theory is to understand this relationship between conceptual and grammatical organization.

#### Grammar and Cognitive/Perceptual Categories

Spatial orientation is one fundamental property of an event description. Typically, an event will involve a change of state or location. In event descriptions, things are located "here" or "there," "in" or "out," "to" or "from," in relation to the speech situation and the event. Thus, when we refer to the spatial and directional orientation of participants in events, we typically identify original states or locations (Source), paths of change (Trajectories), and end states or end locations (Goals). These concepts are basic components of semantic/syntactic mappings (Anderson 1971; Croft 1991; DeLancey 1981a; 1981b; Gruber 1976; Jackendoff 1972; 1983; 1990; Lakoff 1987; Langacker 1987; Talmy 1975).

Also, when talking about an event, we characterize the force dynamics of the event. We distinguish among types of direct and mediated causations as well as various concepts of interpersonal causation such as *forcing*, *allowing*, *preventing*, and *trying*. Cognitive/functional grammarians have shown that these conceptual categories, which organize our common sense notions of force and causation, are also organized around a basic source>goal schema. These categories also underlie the creation and interpretation of linguistic forms (Clark & Carpenter 1989; Croft 1991; Delancey 1990; Givón 1975; Lakoff 1987; Jackendoff 1972; 1983; 1990; Langacker 1987; Shibatani 1976; Talmy 1976; 1988).

Finally, when relating events, we also express different construals of the temporal dynamics. We characterize the aspectual qualities of punctuality or durativity, the degrees of stativity or activity, the relations of completedness or resultant state (Dowty 1979, Nedjalkoff 1988; Timberlake and Chung 1985; Vendler 1967).

It seems clear that spatial, causal, and temporal categories underlie our categorization of event types; hence, these categories underlie, in part, the grammatical organization of clauses and discourses. Exactly how conceptual categories and grammatical organization are related is less clear.

#### Grammar and Social/Cognitive Categories

As we talk about events, we are also performing a social action. Alternating as speaker and addressee, we are interactants in a situated speech event: referring, asserting,

questioning, commanding, promising, joking, flattering, lying, and entertaining. As participants, we have communicative plans and goals which contribute to the micropolitics of situated interaction. When we interact with others, our linguistic behavior simultaneously describes and constitutes our social world (Goffman 1974; Silverstein 1976a; 1987; Volosinov 1929/1973).

In creating discourse, our identities are constructed, in part, by the authority we assume or are attributed by other interactants. This authority can be based on a variety of interpersonal, kinship, class, race, and gender relationships. Discursive authority assumes normative standards of credibility or truthfulness and seeks to define concepts such as "necessary," "definite," "possible," or "doubtful" based on normative values of evidence, perspective, inference, and truth (Chafe & Nichols 1986; Givón 1982; Gumpertz 1990; Kuroda 1973; Lyons 1982; Palmer 1985).

As with the spatial, temporal, and causal domains, there are categories which organize our social knowledge about speech acts, speech event roles, identities, authority, and evidence. For example, in conversations, we make assumptions about other interactants and their beliefs; these models of "other minds" allow us to make appropriate decisions about various conversational strategies and conventions: greeting, turn-taking, referring, correcting, leave-taking. At issue is how the use of this social knowledge is related to grammatical organization (cf. Goody 1978; Gordon & Lakoff 1971; Grice 1975; Sachs, Schegloff, & Jefferson 1974; Sperber & Wilson 1988).

To understand the functioning of a grammatical system, then, is to understand the mappings between perceptual/cognitive, social/cognitive, and linguistic categories as they occur in real time, social interaction.

### The Concept of Intentionality

In one way or another, it is usually the world of human beings that we are concerned with when we talk with others. When we describe events with human participants, we identify the causes, motivations, consequences, and responsibilities of our own and other people's behavior. Ascribing reasons, motivations, and moral responsibility for human behavior entails a distinction between voluntary or intentional behaviors, and other types of non-voluntary or non-intentional occurrences. It has been the foundation of moral philosophy as far back as Aristotle's Ethics. Thus, in categorizing the roles that individuals play within an event, one of the primary distinctions we make is between individuals who initiate action and individuals or entities who merely participate without initiating action.

While it is clear that our construal of intentional and non-intentional events is an important part of how we understand events and human actions, it is less clear how this concept maps onto grammatical organization. For example, while the concepts of "source" or "agent" have clear functional roles at a basic level of semantic/syntactic organization, the functional role of a concept like "intentional action" is less clear. This study

examines how the concept "intentional action" is realized in the grammatical organization of Kathmandu Newari.

### Agency and Transitivity

Although we may assume that our categorization of events underlies, in part, the way clauses are organized, there remains the fundamental question of how conceptual structures and clausal grammar are related. That is, we must ask about the essential relationship between semantics and morphosyntax.

As Lakoff (1977), Hopper & Thompson (1980), Silverstein (1983), Foley and Van Valin (1984), Givón (1984), and others have argued, the salient distinction between "doers" and "non-doers" appears most clearly when two referentially distinct participants appear in a finite, active, declarative, transitive clause. This approach to grammatical categories argues that underlying basic clause structure is a transitive action schema. In the canonical transitive schema, an animate individual intentionally initiates a behavior. The purposeful behavior involves direct physical contact with another individual. This intentional action by the "agent" is the direct causal antecedent for a physical change of state by the "patient."

Givón (1984) summarizes the three essential components of the canonical schema:

1. Agent properties: The agent is a conscious human acting purposefully with force to bring about direct physical contact with the patient.
2. Event/Action properties: The temporal dynamics of the event are punctual and completed with a salient resultant state.



3. Patient properties: The patient is a unique, referentially individuated person or thing which undergoes some salient change of state subsequent to receiving the force exerted by the agent.

The argument for canonical semantic/morphosyntactic mappings runs roughly as follows: The most salient distinctions and communicatively relevant categories of conceptual structure are preserved in the mapping onto linguistic structure. Functional principles of clarity and economy in acquisition, contact, and language change favor isomorphism or structure preservation in mappings between conceptual structures and grammatical structures (Givón 1989; Haiman 1980; 1983; Slobin 1985).

For example, the Source>Trajector>Goal schema is a highly salient component of the transitive schema (Clark and Carpenter 1989). The schematic properties of the schema are preserved in spatial, temporal, and causal domains of the grammar (Anderson 1971; Lakoff 1987; Langacker 1987; Talmy 1975). In particular, as the locus for the spatial, temporal, and causal origins of a transitive event, the agent exhibits exemplary properties of the Source category (DeLancey 1981; 1984b). Following the structure preservation principle, the prominent position of the agent in the event schema maps onto the most prominent position in grammatical structure: the subject.

Functional typological studies confirm that the distinction between agent and non-agent can be partially isomorphic with an opposition between subject and non-subject grammatical relations (Givón 1979; Foley and Van Valin 1984; Merlan 1984;

Van Valin 1990). Although government & binding, relational grammar, and lexical-functional approaches differ from cognitive-functional theories (and one another) in crucial assumptions about the architecture of cognitive/linguistic systems, they also assume some version of a thematic hierarchy to account for the canonical mapping relations between semantic roles and grammatical relations (cf. Chomsky 1981; 1982; Bresnan & Moshi 1990; Grimshaw 1990; Hale & Keyser 1986; Jackendoff 1972; 1990; Marantz 1984; Perlmutter 1978; 1982; Rosen 1984; Wilkins 1988).

In short, there is no disagreement that the agent role is the most prominent thematic role on the hierarchy. In fact, while cognitive-functional approaches have long argued for canonical mapping relations between event representations and clausal morphosyntax, as Grimshaw's (1990) comments below suggest, current assumptions in "formal/generative" approaches are now actually quite similar in this respect.

In the strongest possible theory, the a-structure [argument structure or lexical-syntactic structure DH] of a lexical item is predictable from its meaning, and the d-structure [deep structure or clausal projection DH] the item appears in is predictable from its a-structure and the independent parametric characteristics of the language. (1990:1)

Baker (1988) makes a similar iconicity or structure-preservation principle the foundation of his theory of incorporation. He calls it the Uniformity of Theta Assignment Hypothesis:

Identical thematic relations between items are represented by identical structural relationships between those items at the level of D-structure (1988:46).

The structure preservation principle makes sense as long as we know what thematic relations or conceptual structures are. But, what are "thematic relations" and what is the conceptual structure of "intentional action," and how are the two concepts related to one another?

#### The Functional Autonomy of the Concept "Intentional Action"

The concept of "intention" or "volition" has been identified as one of several conceptual parameters which may be attributed to the agent thematic role and, by implication, the transitivity prototype. However, there is abundant cross linguistic evidence suggesting that the concept of "intentional action" can have functional realizations independent of other transitivity parameters.

In case marking typology, for example, there is a semantic distinction between event types reflected in "active/non-active" case marking systems (DeLancey 1981; Hale 1973; Klimov 1979; Sapir 1917). Only animate entities have the potential for active (or subject) case marking; the "active" or "subject" case typically correlates with NPs referring to intentional actors. In other words, the morphosyntactic process which assigns case marking to noun phrases distinguishes between two event types without regard to the valency of the clause. Instead, the system distinguishes between prototypical intentional actions and non-intentional actions or events.

Grammatical oppositions distinguishing intentional and non-intentional actions occur in a variety of languages

including Acehnese (Durie 1985), Eastern Pomo, (McLendon 1978), Choctaw (Davies 1986), Cupeño (Hill 1973), and Lhasa Tibetan (DeLancey 1985b). Underlying the opposition is the grammaticalization of a distinction between active/non-active event types. The active/non-active distinction is prototypically a distinction between events which can be self-initiated (or intentional) and events which can not be self-initiated.

Significantly, this grammaticalization occurs independently of the affectedness of the patient, or whether there is a patient in the clause at all. That is, in these languages, the concept of self-initiated vs. non-initiated actions is realized in grammatical contrasts independently of other transitivity parameters such as valency or patient affectedness. This shows that the concept of intentional action can be mapped directly into morphosyntactic organization and can be functionally independent of other transitivity parameters. In other words, while the transitivity schema may help account for why distinctive semantic properties can become conflated with one another when they are mapped onto grammatical organization, the notion of a transitive prototype does not address the issue of how components of the schema can have distinctive or independent realizations.

In some languages, the contrastive syntactic properties of actor and non-actor intransitive subjects can be grammaticalized as an opposition in initial grammatical relations, or argument structures: this is the Unaccusative Hypothesis (Burzio 1986; Perlmutter 1978; 1982). These syntactic accounts do not directly appeal to the semantic distinction between intentional

and non-intentional action types; for example, Rosen (1984) specifically argues that since specific languages grammaticalize predicates somewhat differently, split-intransitive argument structures cannot be reduced to pure semantic distinctions. In contrast, Van Valin (1990) argues that split intransitivity is motivated by the semantic parameters of inherent aspect and volitionality. At issue are the mapping relations between conceptual structures and the grammar.

Although the theoretical status of the distinction between initial grammatical relations (or lexical-syntactic structure) and conceptual structures may be unresolved, the typological distributions reveal a stable pattern of grammaticalization. For those languages that encode split intransitivity, intransitives of self-initiated action assume subject properties and intransitives of non-initiated events do not; the converse is never the case.

The point is that the opposition between self-initiated and non-initiated actions can be formally realized in case systems, or deeper lexical-grammatical properties, or both. In these cases, the distinction between self-initiated and non-initiated events appears as the primary semantic opposition which maps onto a core morphosyntactic opposition. This distinction is mapped into the morphosyntax independent of other conceptual properties of the agency/transitivity prototype.

This point is significant: If a distinction between intentional and non-intentional events can be the sole opposition which determines the distribution of core grammatical relations or case, then a semantic based account must analyze

the distinction independent of other agency and transitivity parameters. This, in turn, raises two fundamental questions about the relationship between the concept of intentional action and grammar:

1. What are the parameters by which the concept of intentional action can be related to grammatical organization.

2. What are the parameters by which the concept of intentional action interacts, or does not interact, with other conceptual features of the agency and transitivity prototype?

In other words, we are interested in the mappings between conceptual and linguistic structure and the parameters by which related transitivity concepts such as intentionality, agency, and causation can have independent realizations in the grammar.

### The Other Intentionality

There is another important dimension to the mapping of intentional action onto the grammar, independent of other transitivity parameters. While studies of grammatical organization have focused primarily on "intention" or "volition" as agent thematic role properties, the concept of intention has been living another life. To see the issue involved consider the case of Oedipus and the two syllogisms below, one of which only a Freudian could love.

Oedipus married Jocasta.  
Jocasta was his mother.  
Therefore, Oedipus married his mother.

Oedipus intentionally married Jocasta.  
Jocasta was his mother.  
Therefore, Oedipus intentionally married his mother.

At issue, of course, is the referential opacity which arises in a belief context introduced by intentionality (Quine 1956). Although our concern is not with referential opacity *per se*, there is an important connection. With the adverb "intentionally," the truth of the proposition can only be judged relative to the beliefs of the person to whom intention is being attributed. The semantic interpretation must capture the fact that the linguistic expression "x intentionally did y" can be evaluated only via access to, or inference about, the mental representation of the action by the actor. That is, it is necessary to know or assume the actor's goals before one can make an assertion about intentionality. Furthermore, an assertion that "x intentionally did y" which does not involve direct access to actor's plans or goals can only be an inference based on assumptions about the etiology of human action. As we shall see, unlike English, Newari grammar distinguishes between direct and indirect attributions of intentional action.

Apart from the issue of thematic roles, the concept of intentional action in Newari grammar engenders several related issues in the semantic representation of events and propositional attitudes (cf. Anderson and Owens 1990; Davidson 1980; Gunderson 1990; Jackendoff 1985; Quine 1956; Searle 1983; 1990), mental spaces or discourse representations (Fauconnier 1984; Kamp 1984; Sells 1987), and evidentiality (Chafe & Nichols, eds. 1986; Jacobson 1957; Givón 1982; Kuroda 1973; Woodbury 1986). With only a few exceptions to be discussed in Chapter IV, there has been almost no discussion in the linguistic literature connecting "intentionality" or "volitionality" as an agent

property with "intentionality" as a propositional attitude in which the actor has a particular mental state with respect to a self-initiated action.

To conclude, the concept of intentional action has two distinct dimensions, traditionally studied independently of one another. On the one hand, the concept of self-initiated action is subsumed within a larger conceptual domain of agency, causation and the transitivity prototype. Our interest is in the mapping between conceptual structures and linguistic subsystems such as grammatical relations, case, verb agreement, or inflection. The cross-linguistic evidence shows that the concept of intentionality may or may not have direct mappings with grammatical organization independent of other transitivity parameters. Thus, while the transitivity prototype accounts for some of the canonical mappings between semantics and the morphosyntax, there remains the important task of:

1. Describing how the concepts of intentionality, agency, and causation in conceptual structure may be mapped onto the grammar.

2. Describing the interaction or non-interaction among these systems when they are mapped onto the grammar.

On the other hand, the concept of intentional action is subsumed within the larger conceptual domain of modality, evidentiality, and discourse representations. The Newari data will suggest that we examine more closely the evidential and discourse functions by which intentional actions, and belief states in general, may be attributed to individuals in contexts of situated speech. Also, the data will require that we



consider how to characterize the notion "x mentally represents y" so that we may describe its functional role in the grammar.

As we shall see, both dimensions of intentional action are fundamental for describing the grammar of Kathmandu Newari.

### Goals of This Study

This study is a descriptive account of the relationship between the concept of intentional action, the grammatical organization of the clause, and the dynamics of evidentiality in Kathmandu Newari, a Tibeto-Burman language spoken primarily in the Kathmandu valley of Nepal.<sup>1</sup> In particular, the study focuses on the conceptual structure of "intentional action" along with the lexical, morphological, and syntactic reflexes of this notion in situated speech. Fundamental to the discussion is the system of finite verb inflection.

The distribution of inflectional forms in finite clauses reveals three lexical-semantic classes of verbs: (a) verbs describing events which typically involve self-initiated behavior, or Control verbs, (b) verbs describing events which are incompatible with the concept of self-initiated behavior, or Non-Control verbs, and (c) verbs describing events which admit alternative interpretations of self-initiated or non self-initiated behavior, or Fluid verbs.

This implicit categorization of events as self-initiated or non-initiated is fundamental to Newari verb semantics.

In addition to these lexical semantic properties, Newari grammar incorporates the propositional attitude properties of intentional action. For example, the distribution of

inflectional forms indexes two speech act participant categories distinct from the more familiar categories of speaker and addressee. More specifically, the opposition between two sets of inflectional forms (called SET1 and SET2) distinguishes between: (a) participants to whom intentional action may be directly attributed in situated interaction, and (b) participants to whom intentional action may not be directly attributed in situated interaction.

In other words, the grammar recognizes that, in addition to self-initiated behavior, intentional action involves a mental state which can only be attributed to individuals under certain evidential and discourse conditions.

This study will show that the construal of intentional action involving two distinct dimensions is fundamental to Newari grammar. The evidence shows that underlying the distribution of finite inflectional forms for verbs is both a conceptual model of intentional action and a set of evidential/discourse principles which constrain the attribution of intentional action to individuals in situated interaction.

#### Outline of This Study

The primary goal of the study is to describe how the concept of intentional action is realized in Newari grammar. In addition, the study examines the functional organization by which conceptual structure is mapped onto grammatical systems in discourse contexts.

The fundamental issue to be addressed in Chapter II is the following:

How do the lexical semantic and the discourse pragmatic domains interact to determine the distribution of inflectional forms and express the distinction between intentional and non-intentional actions?

Chapter II outlines the distribution of finite inflectional forms and the distributional criteria for verb classes: Control, Non-control, and Fluid. It then goes on to show that the selection of an inflectional form can be described relative to two functional domains: (a) verb semantics, and (b) the speech act participant role of the individual of whom the action/event is being predicated. Chapter II concludes that the distribution of inflectional forms must be described in terms of the interaction between lexical semantic and discourse pragmatic principles.

The distributional properties of the Newari inflectional system have been outlined in several important works on the semantics and morphosyntax of Newari verbs (Bendix 1974; Hale 1980). The distribution can be described essentially as follows:

There is a set of verbal inflections (SET1) that only occur with those verbs that can plausibly be interpreted as involving an intentional action. Furthermore, they only occur when the attribution of intention to an individual is licensed by certain evidential and interactional principles. More specifically, in simple clauses, the SET1 inflectional form occurs whenever:

1. The verb describes an action type involving intentional action or control by an actor.

2. the speech act is either: (a) declarative and the actor is first-person, or (b) interrogative and the actor is second-person, or (c) reported speech and the main and subordinate clause actors are coreferential.

The default or SET2 form is used in all other finite environments. We consider the details in Chapters II and III.

In a series of articles, Bendix (1974; 1983; to appear) insightfully analyzes the Newari inflectional system and its semantic and pragmatic functions. His analysis identifies three classes of verbs relative to the feature of "Control" and the evidential principles that correspond to the speech event roles. Bendix's study focuses on the pragmatic and evidential functions of the inflectional system and leaves open two important questions on the semantic/morphosyntax mappings underlying the inflection system. Bendix himself states:

I will not here argue the relative merits of considering [the Control/Non-Control distinction DH] a semantic one for these verbs, i.e., to be included in their definitions, [or derive] it pragmatically from beliefs about the kinds of actions and states they represent. I will also not digress to give consideration to arguments for and against the alternative analysis of [SET1 inflection DH] as signaling +CONTROL rather than +INTENTION (to appear:9).

Bendix is interested in the strategic functions of the inflectional contrasts and demonstrates the basic principles which underlie the distributions; however, as he himself states, he is not interested in the functional organization per se. His discussion leaves two important questions unanswered. Chapters III and IV address these two questions:

What properties or features of the concept "intentional action," such as the distinction between "control" and "intention," are functionally relevant in Newari

morphosyntax? More generally, what is the conceptual structure by which intentional action is construed in the grammar of Kathmandu Newari?

When an utterance in discourse indexes an opposition between intentional and non-intentional action, what are the contributions of the lexical (i.e., verb), morphological (i.e., inflection), and pragmatic (i.e., discourse/evidential) information. In other words, what parts of the conceptual structure are mapped onto what parts of the grammar and how do they interact?

Chapter III is a more detailed examination of the semantic and morphosyntactic distinctions among verb classes. Through a variety of semantic tests, it shows that the construal of intentional action consists of two distinct, but related, notions: one involving the concept of self-initiated force and the other involving a unique mental state or plan. In short, underlying the lexical semantic and discourse pragmatic domains is a conceptual structure for intentional action consisting of two related domains: self-initiated force and mental plan.

Chapter IV draws on important insights from studies of agency and intentional action in philosophy, language acquisition, and cognitive linguistics to argue for a conceptual structure of intentional action consisting of two domains: (a) the mental representation of a plan, and (b) the self-initiation of a force in accordance with the mental plan.

It argues that although the two domains together make up the construal of intentional action, the two domains have a different status in morphosyntactic processes. More specifically, the notion of self-initiated force is part of the inherent lexical structure of verbs; its presence or absence underlies the classification of verb types: Control, Non-Control, and Fluid. In contrast, the representational domain

underlies the indexical function of the SET1/SET2 inflectional opposition in finite predication.

In Newari scholarship, the opposition between inflectional forms is often referred to as the "conjunct/disjunct" opposition, terms used in the seminal work on verbal inflection by Austin Hale (1980). The terms "conjunct" and "disjunct" follow from the coreference or logophoric properties of the "conjunct" forms in contexts of reported speech. Highlighting the logophoric aspects, Joshi (1985; 1988a) introduces the perspicacious terms atma 'self' and para 'other' to characterize the opposition. Since the goal of this paper is to examine, rather than presuppose, the conceptual structures and discourse principles which underlie the distribution of inflectional forms, I will use the neutral terms (SET1/SET2).

As with Bendix's work, Hale (1980) identifies the two important variables which underlie the distribution of inflectional form: The clause must contain an intentional actor and the speech act and person roles constrain the occurrence of inflections which indicate intentional action. Again, however, the conceptual structure of intentional action is left implicit and the semantics/morphosyntax mappings are not specified.

Kölver (1976) and Hale & Manandhar (1980) provide comprehensive, seminal studies of the relationship between valency, semantic roles and morphological case in Newari. In a similar vein, Shresthacharya (1981) investigates the inflectional and derivational classes of Newari verbs and identifies semantic classes of verbs. Givón (1985) argues that transitivity parameters underlie case marking alternations in infinitive

complements. Tuladhar (1990) provides a comprehensive study of negation and the structure of Newari clauses. Genetti (1988) quantifies the referential distance between noun phrases in clause chains and argues that differences in the topicality of NPs underlies an Ergative/Absolutive alternation in case marking.

Common to all of these studies is the focus on how semantic or pragmatic roles are reflected in clausal morphosyntax, particularly case marking. However, none of the studies directly addresses the fundamental question: What is the relationship between the concept of intentional action, as it is realized in the inflectional system, and the thematic role categories which underlie lexical structures and the case system. Chapter V focuses on this question:

If intentionality and control are prototypical actor/agent properties central to the hierarchical assignment of thematic roles to argument positions, what is the relationship between the concept of intentional action realized by the inflectional opposition and the concepts of actor or agent as thematic role concepts? Alternatively, how does the system of inflectional oppositions correlate with other morphosyntactic reflections of argument structure, e.g., case assignment.

Chapters V and VI examine in more detail the relationship between the conceptual structure of events/actions, lexical structure, and the morphosyntax. In contrast to Chapters III and IV, which are only concerned with the concept of intentional action, Chapter V examines the lexical semantic properties which underlie the argument structure of verbs and their case assigning properties. Chapter V argues that case assignment is a mapping between an underlying Source>Goal schema and argument structure, independent of the opposition between intentional and

non-intentional action. When mapping conceptual structure onto morphosyntactic structure, the thematic role concept of "agent/source" is independent of the concept of "intentional action."

As Talmy's (1976; 1988) work in cognitive grammar has argued, the concepts of intentional action and agency can be subsumed within the larger conceptual domain of causality and force dynamics. In Newari, Malla (1984) shows that there are two primary categories of causatives, one productive, one non-productive. Recently, Kanskar (1990) has argued that the behavior of Newari causatives with certain verbs can be attributed to unaccusative lexical structures.

As noted above, it has been argued that unaccusative lexical structures correlate with a semantic opposition between actor and non-actor subjects (cf. Foley 1990 and Rosen 1984 for conflicting viewpoints). Thus, Kanskar's observations about causatives raises another important question, addressed in Chapter VI:

What is the relationship in Newari between the syntax and semantics of causatives and the morphosyntactic reflexes of intentional action. More specifically, if causatives do indeed provide evidence for unaccusative lexical structures in Newari, then what is the relationship between the concept of intentional action and unaccusative syntax in Newari?

Chapter VI analyzes the morphosyntax of causative constructions and argues for a more detailed lexical-semantic organization for verbs. More specifically, the behavior of causatives shows the grammaticalization of unaccusative lexical structures. This results in two causative types: a canonical causative and a middle voice causative expressing causative/intentional oppositions such as "remember" vs. "recall."



However, this grammaticalization is not a function of the same opposition between intentional and non-intentional actions manifested in the inflectional opposition. Instead, it is restricted to a class of experiencer/cognition verbs, where causativization, not inflection, expresses the distinction between self-initiated and non-initiated mental events. In short, the same functional distinction (intentional/non-intentional) is expressed in two distinct grammatical domains which function independently of one another; again, this provides evidence that the concept "intentional action" relevant for inflection can not be simply subsumed in a causation or transitivity mapping schema.

Finally, as several studies have shown, there is an important relationship between the construal of aspect/modality dynamics in the clause and the construal of event types, including the action vs. non-action distinction (DeLancey 1981; Dowty 1979; Grimshaw 1990; Foley and Van Valin 1984; Van Valin 1990; Vendler 1967). In Newari, the inflectional paradigm marks a distinction between the SET1/SET2 opposition on the one hand and tense/aspect oppositions on the other hand. More importantly, there are aspect/modality verbs taking infinitive complements which interact with the inflectional opposition. Significantly, each of the verbs exhibits its own unique distributional asymmetry which is functionally identical to the SET1/SET2 distributional asymmetry. This raises important questions about the relationship between the functional domain which underlies the asymmetries. That is, if the same functional asymmetries are found in grammatical domains other

than inflection, then how are we to understand the relationship between the functional domains and the grammatical domains?

Chapter VII focuses on this question:

What is the relationship between the concept of intentional action and the expression of aspect/modality distinctions in the clause? More specifically, what is the functional organization which underlies the same distributional asymmetries for the inflectional contrast and a set of aspect/modality verbs?

Chapter VII turns to the domain of aspect/modality, evidentiality, and discourse roles. The distribution of a set of aspect/modality verbs shows that the functional principles underlying the distribution of inflection forms have realizations in grammatical contexts other than the SET1/SET2 inflectional contrast itself. More specifically, it shows that these asymmetries exactly parallel the distribution of SET1/SET2 inflection. The existence of the same distributional asymmetries in more than one morphosyntactic system constitutes strong evidence for the existence of the underlying conceptual schemata and functional domains.

In Chapter VIII, we return to these questions for overview and conclusion.

### Notes

<sup>1</sup> The data for this study were collected in Kathmandu during two field trips: September 1984-September 1985 and June 1988-June 1989. The examples come from three elicitation methods which I used when working:

- 1) direct elicitations
- 2) narrative and conversational texts
- 3) elicitations based on examples taken from narrative and conversations texts.

The scale of judgements is as follows:

1) starred (\*) examples were judged entirely unacceptable by all of the native speakers I consulted.

2) double question marks ?? indicate that the example was initially judged unacceptable by all or most of the speakers. However, some speakers showed equivocation, indicating that it sounded "non-standard" or "never-used" rather than "entirely unacceptable."

3) a single question mark ? indicates that there was considerable variation as to the acceptability of the example: some found it acceptable, some found it odd, some found it unacceptable.

4) examples which are not marked are those which were acceptable to all of the native speakers consulted.

To all of the speakers who helped me with the elicitations, transcriptions, and interpretations of examples, my deepest thanks: Manoj Kanskar, Sunil Nepali, Syam Mahajan, Gita Manandhar, JayaSri Shakya, Suresh Shakya, and Rajendra Shrestha. The final text examples and judgements were checked by Mr. Daya Ratna Shakya to whom I am deeply grateful. Any errors or misinterpretations of the data are due to my own incomplete understanding of colloquial Kathmandu Newari.

## CHAPTER II

## THE DISTRIBUTION OF INFLECTIONAL FORMS

This chapter introduces the morphosyntactic pattern which is the focus of the study. Broadly speaking, at issue are the principles which underlie the distribution of inflectional forms in finite environments, where inflection covaries relative to two functional domains, one lexical semantic and the other discourse pragmatic.

The first domain is lexical semantic. That is, the inflectional opposition covaries relative to the inherent semantics of the verb and the construal of intentionality for the action being described. More specifically, the distribution of forms suggests three classes of verb:

1. Those that describe prototypical self-initiated behaviors, Control verbs.
2. Those that describe events incompatible with self-initiated behavior, Non-Control verbs.
3. Those that describe events/actions which admit alternate interpretations of intentionality, or Fluid verbs.<sup>1</sup>

The second domain is discourse pragmatic. That is, inflectional forms also covary relative to the roles of participants in the speech situation, in particular, the role of epistemic authority in the speech event. The distribution shows that first persons in declarative clauses and second persons in interrogative clauses share a discourse role--the epistemic

authority for the proposition in the clause. I will call this role the Epistemic Source.

After outlining the basic distribution of inflectional forms in simple finite clauses, we then consider how finite inflection is realized in the environments of attributive (relative) clauses, nominalizations, and two types of complex clauses. The goal here is simply to illustrate the range of environments in which the finite inflectional forms realize the functional oppositions.

The chapter concludes with a hypothesis which accounts for the interaction between the lexical semantic and discourse pragmatic domains, and the distribution of inflectional forms. The hypothesis will serve to guide the subsequent discussion.

### Verb Inflection

The inflectional opposition is manifested via two sets of obligatory suffixes (termed SET1 and SET2) in finite clauses. Informally, the system can be characterized as follows: SET1 suffixes index a clausal actor whenever the actor has the epistemic authority attributed to one of the speech event participants (the speaker in statements or the addressee in questions). More specifically, a clause will have a SET1 form whenever:

1. The clause is finite.
2. The event being described is interpreted as involving a self-initiated behavior by the actor.
3. The speech act is: (a) declarative and the actor is first person, or, (b) interrogative and the actor is second

person, or, (c) reported speech and the source of the direct speech and the subject in the reported clause are coreferential (Bendix 1974; to appear; Hale 1980; Hargreaves 1990; to appear).

SET2 suffixes occur in all other finite environments except those outlined above. For reasons that will become clear later on, SET2 is designated as the default category for finite environments. The inflectional paradigm in finite clauses is given below:<sup>2</sup>

	PAST		NONPAST
SET1	-a		-e
SET2	PERFECTIVE	IMPERFECTIVE	NONPAST
	-O	-u/v:	-i

### Inflection in Simple Finite Clauses

#### Declarative Clauses

In declarative clauses, SET1/SET2 inflection covaries along two dimensions:

1. A semantic distinction between self-initiated and non-initiated event types.

2. A referential distinction between 1st and non-1st person subjects. With one class of verbs (Control), the SET1/SET2 inflection distinguishes first and non-first person. SET1 forms occur with first person subjects; SET2 forms occur with 2nd and 3rd person subjects. Semantically, verbs which exhibit a first/non-first opposition in declarative clauses describe intentional, or self-initiated behaviors and hence will be called CONTROL verbs.

In the first set of examples, won- 'go' is a Control verb with an Absolutive subject. The SET1 suffix -a occurs with first person only. The SET2 suffix -O occurs with second and third persons.

- (1)           ji               won-a  
          1/ABS       go-PST/SET1  
          "I went."
- (2)           chO              won-O  
          2/ABS       go-PERF/SET2  
          "You went."
- (3)           wo               won-O  
          3/ABS       go-PERF/SET2  
          "S/he went."

In this second set of examples, va(t)- 'do' is a Control verb with an Ergative subject. Again, inflection covaries with the opposition between first and non-first person subjects.<sup>3</sup>

- (4)           jĩ:           jya   yan-a  
          1/ERG       work do-PST/SET1  
          "I did the work."
- (5)           chŌ:           jya   yat-O  
          2/ERG       work do-PERF/SET2  
          "You did the work."
- (6)           wŌ:           jya   yat-O  
          3/ERG       work do-PERF/SET2  
          "S/he did the work."

In contrast, with a second class of verbs, termed NON-CONTROL (-Control) verbs, the first/non-first person distinction is neutralized and only SET2 forms occur. The verb then- 'arrive' takes an Absolutive subject and belongs to the class of Non-Control verbs.

- (7)           ji               mhigO       then-O  
          1/ABS       yesterday arrive-PERF/SET2  
          "I arrived yesterday."

- (8)            chO            mhigO        then-O  
               2/ABS           yesterday arrive-PERF/SET2  
               "You arrived."
- (9)            wo            mhigO        then-O  
               3/ABS           yesterday arrive-PERF/SET2  
               "He/she/it arrived yesterday."

The verb bu(t)- 'lose (in a contest)' is also a Non-Control verb and exhibits the same distribution.

- (10)           ji            but-O  
               1/ABS           lose-PERF/SET2  
               "I lost (in the game)."
- (11)           chO            but-O  
               2/ABS           lose-PERF/SET2  
               "You lost (in the game)."
- (12)           wo            but-O  
               3/ABS           lose-PERF/SET2  
               "He/she lost (in the game)."

Similarly, the verb thu(1)- 'understand' is a Non-Control verb; it takes an Ergative subject, but exhibits only SET2 forms.

- (13)           jĩ:            thul-O  
               1/ERG           understand-PERF/SET2  
               "I understood (it)."
- (14)           chŏ:            thul-O  
               2/ERG           understand-PERF/SET2  
               "You understood (it)."
- (15)           wŏ:            thul-O  
               3/ERG           understood-PERF/SET2  
               "S/he understood (it)."

In short, the distribution of SET1 and SET2 forms with first person reveals a covert distinction between two classes of verbs. In conceptual terms, the distinction between verb classes corresponds to a distinction between events whose description entails a self-initiated behavior and those which do not.



Finally, there is a class of Fluid verbs allowing either SET1 or SET2 inflection in first person clauses, depending on the attribution of intention. The occurrence of a SET1 form indicates a self-initiated event; in contrast, the occurrence of a SET2 form indicates a non-initiated event.

- (16)           ji           lokhO-e   dun-O  
           1/ABS           water-LOC submerge-PERF/SET2  
           "I sank into the water." (non-intentional)
- (17)           ji           lokhO-e   dun-a  
           1/ABS           water-LOC submerge-PST/SET1  
           "I dipped into the water." (intentional)

Fluid marking is not limited to intransitive verbs. With the verb napO=la- 'meet/run into', both intentional and non-intentional interpretations are equally plausible and commonly attested in discourse. Note that case marking does not co-vary with verb inflection. We take up this issue in Chapters V and VI.

- (18)           ji:   laksmi                   napO=lan-a  
           1/ERG Laksmi                   with=meet-PST/SET1  
           "I met Laksmi." (intentional)
- (19)           ji:   laksmi                   napa=lat-O  
           1/ERG Laksmi                   with=meet-PERF/SET2  
           "I met/ran into Laksmi." (non-intentional)

Again, the distinction is not manifested for non-first person, where only the SET2 form is possible.

- (20)           wō:   laksmi                   napa=lat-O  
           3/ERG Laksmi                   with=meet-PERF/SET2  
           "S/he met Laksmi."
- (21)\*           wō:   laksmi                   napa=lan-a  
           1/ERG Laksmi                   with=meet-PST/SET1

## Declaratives vs. Interrogatives

In declarative clauses, the inflectional paradigm covertly distinguishes two classes of verbs, Control and Non-Control, and admits an intermediate class of Fluid verbs. In addition, the distribution of SET1/SET2 inflection relative to person shows a first/non-first person distinction.

In contrast to the oppositions in declarative clauses, in interrogative clauses with Control verbs, SET1/SET2 inflection distinguishes second person from non-second person. Consider the pairs below: The verb ton- 'to drink, smoke' is a Control verb.

- (22)       ji:   O:pwO     ton-a  
          1/ERG alot     drink-PST/SET1  
          "I drank too much."
- (23)       ji:   O:pwO     ton-O                    la  
          1/ERG alot     drink-PERF/SET2       Q  
          "Did I drink too much?"

The context for the declarative clause in (22) is the morning after a feast; the speaker is merely narrating the activities of the previous night. The context for the interrogative clause in (23) is the morning after a feast where the speaker cannot clearly recall all of the previous night's events. The speaker is asking an addressee, who also attended the feast, about what happened.

In contrast, an interrogative clause with second person requires SET1 inflection. The declarative clause requires SET2 inflection.

- (24)       chŌ:   O:pwO     ton-a                    la  
          2/ERG alot     drink-PST/SET1       Q  
          "Did you drink too much?"

- (25)        chŏ:    0:pwŏ        ton-ŏ  
              2/ERG alot        drink-PERF/SET2  
              "You drank too much."

The distinction is neutralized with third persons as in (26) and (27) below.

- (26)        wŏ:        0:pwŏ        ton-ŏ                la  
              3/ERG alot        drink-PERF/SET2    Œ  
              "Did s/he drink too much?"

- (27)        wŏ:        0:pwŏ        ton-ŏ  
              3/ERG alot        drink-PERF/SET2  
              "S/he drank too much."

Similarly, the distinction is neutralized with Non-Control verbs. Thus, in (28) and (29), the Non-Control verb gya- 'be afraid' takes SET2 inflection, as it does in all contexts.

- (28)        chŏ                gyat-ŏ                la  
              2/ABS                afraid-PERF/SET2    Œ  
              "Did you become afraid?"

- (29)        chŏ                gyat-ŏ                thē  
              2/ABS                afraid-PERF/SET2    like  
              "You looked scared."

In short, in interrogative clauses, SET1 forms occur whenever the verb is a Control verb and the actor is second person. Why should this be the case?

In a declarative speech act, the speaker (or first person) is assumed to be the epistemic authority for the proposition being asserted; otherwise, the declarative clause is likely to be indexed with evidential or modality disclaimers (Gordon & Lakoff 1971; Grice 1975).

In contrast, in an interrogative speech act, the addressee is assumed to be the epistemic authority for the proposition. In other words, in asking a question, the speaker is attributing the knowledge to the addressee and seeking access to it, implying that the speaker does not have access to the knowledge.

The attribution of epistemic authority to the address is constitutive of the interrogative speech act.

SET1 forms occur in interrogative clauses when the actor in the clause is coreferential with the addressee, who is identified as the epistemic authority in interrogative contexts. As noted above, we will use the term "Epistemic Source" for the discourse role which assumes the epistemic authority.

The distribution of SET1 and SET2 forms in interrogative clauses is not confined to yes/no questions with the interrogative particle la. Since the selection of the SET1 form is a function of the verb class (Control) and the discourse role which is assigned epistemic authority, any interrogative clause will exhibit the same properties. Thus, all of the second person interrogative clauses below take SET1 forms, whereas the third person interrogative clauses take SET2 forms.

- (30)        chŌ: chu        yan-a  
              2/ERG what     do-PST/SET1  
              "What did you do?"
- (31)        wŌ: chu        yat-O  
              3/ERG what     do-PERF/SET2  
              "What did s/he do?"
- (32)        chŌ    gŌnŌ:        woy-a  
              2/ABS where/ABL come-PST/SET1  
              "Where have you come from?"
- (33)        wo        gŌnŌ:        wol-O  
              3/ABS where/ABL come-PERF/SET2  
              "Where did s/he come from?"
- (34)        chŌ: mŌmŌ-ca    gwo-gŌ:        nŌy-a  
              2/ERG momo-DIM how.many-CL eat-PST/SET1  
              "How many momos did you eat?"
- (35)        wŌ: mŌmŌ-ca    gwo-gŌ:        nŌl-O  
              3/ERG momo-DIM how.many-CL eat-PERF/SET2  
              "How many momos did s/he eat?"

The discourse role which is assigned the epistemic authority in the speech event will be referred to as the Epistemic Source. That is, first persons in declarative clauses assume the role of Epistemic Source. Conversely, second persons in interrogative clauses are assigned the role of Epistemic Source by the speaker by engaging in an interrogative speech act. Thus, the distribution of SET1 and SET2 inflectional forms covaries, in part, with the discourse role of Epistemic Source.

### Reported Speech

SET1 forms can occur with 3rd persons in reported speech when the original speaker or Epistemic Source (not the speaker reporting the speech) and the actor in the reported clause are co-referential. That is, SET1 forms function logophorically. SET2 forms occur in all other environments.

In (36) below, the situation again reflects the morning after a feast. Clause final hŏ is an evidential particle marking reported speech. Although the clause is a declarative first person clause, it takes SET2 inflection in the reported speech environment. The source for the hearsay evidence (Epistemic Source) and the clausal actor are not co-referential.

- (36)       jĩ:    0:pwo       ton-0               hŏ  
           1/ERG alot       drink-PERF/SET2 EVD  
           "It's said that I drank too much."

In reported speech, SET1 inflection functions logophorically. It is used when the source for original speech event (Epistemic Source) is coreferential with the clausal actor. The SET2 form is used when the Epistemic Source is non-coreferential with the clausal actor, or when the action itself

is interpreted as non-controlled. The contrast is illustrated below.

- (37)        syam-Ǿ        0:pw0        ton-0        hǾ  
              Syam-ERG    alot        drink-PERF/SET2    EVD  
              "It's said that Syam drank too much."
- (38)        syam-Ǿ        0:pw0        ton-a        hǾ  
              Syam-ERG    alot        drink-PST/SET1    EVD  
              "Syam<sub>i</sub> said that he<sub>i</sub> drank too much."

Recall that the verb thu(1)- 'understand, realize' is a Non-Control verb; hence, SET1 is impossible. The logophoric interpretation is neutralized.

- (39)        wǾ:    khǾ        thul-0        hǾ  
              3/ERG matter understand-PERF/SET2    EVD  
              S/he<sub>i</sub> said that s/he<sub>i,j</sub> understood."

The discourse notion of Epistemic Source has three contexts for realization. First, the speaker in a declarative clauses assume the role of Epistemic Source, unless s/he indicates otherwise via evidential operators. Second, the addressee in an interrogative clause is attributed the role of Epistemic Source by virtue of being asked a question by the speaker. Third, the original speaker in a reported speech utterance is attributed the role of Epistemic Source for the proposition in the reported speech clause.

#### Attributive Clauses and Nominalizations

Thus far, the distribution of SET1 and SET2 forms has been observed in simple finite clauses and reported speech. The opposition also occurs in attributive clauses and nominalizations. In these constructions, the aspectual opposition between SET2 Perfective and SET2 Imperfective is neutralized. Only the SET2 Imperfective form occurs. The inflectional paradigm is

thus reduced to a two-way opposition between SET1/SET2 on the one hand, and Past/Non-Past on the other. The inflectional forms in attributive clauses and nominalizations are diagrammed below:

	PAST	NONPAST
SET1	-a-(gu/mhO/pĩ:)	-e-(gu/mhO/pĩ:)
SET2	-u-/v:-(gu/mhO/pĩ:)	-i-(gu/mhO/pĩ:)

### Attributive Clauses

Attributive clauses are preposed as modifiers to a head noun and are marked with one of three nominalizer/attributive suffixes depending on the animacy and number of the head noun (Hale 1985; Kölver 1978). The choice of SET1 or SET2 inflection is determined via the interaction of verb type and Epistemic Source.

For example, the suffix -gu occurs with inanimate head nouns. In the first set of examples, con- 'stay, remain' is a Control verb. Hence, in a simple declarative clause SET1 occurs when the epistemic source and the actor/subject are coreferential; SET2 occurs elsewhere.

- (40)        ji                con-a-gu                chē  
              1/ABS            stay-PST/SET1-NOM    house  
              "The house where I stayed..."
- (41)        chO                cō:-gu                chē  
              2/ABS            stay-IMPERF/SET2-NOM   house  
              "The house where you stayed..."
- (42)        laxmi                cō:-gu                chē  
              Laxmi/ABS    stay-IMPERF/SET2-NOM   house  
              "The house where Laxmi stayed..."

In contrast, when the verb is a Non-Control verb, the SET1/SET2 opposition is neutralized and only SET2 is possible. Recall that then- 'arrive' is a Non-Control verb.

- (43)       ji           thyŃ:-gu           thae  
1/ABS       arrive/IMPERF/SET2-NOM   place  
"The place where I arrived..."
- (44)       chŃ         thyŃ:-gu           thae  
2/ABS       arrive/IMPERF/SET2-NOM   place  
"The place where you arrived..."
- (45)       laxmi       thyŃ:-gu           thae  
Laxmi/ABS   arrive/IMPERF/SET2-NOM   place  
"The place where Laxmi arrived..."

The suffix -mhŃ occurs with singular animate head nouns. Again, the choice of inflection is determined by the interaction of Control and Epistemic Source.

- (46)       ji:    wo-yatŃ biy-a-gu           dheba  
1/ERG 3-DAT   give-PST/SET1-NOM   money  
"The money which I gave to him/her..."
- (47)       ji:    dheba biy-a-mhŃ           pasa  
1/ERG money   give-PST/SET1-NOM   pasa  
"The friend to whom I gave the money..."
- (48)       chŃ:   dheba byu:-mhŃ           pasa  
2/ERG money   give/IMPERF/SET2-NOM   pasa  
"The friend to whom you gave the money..."
- (49)       ji-to dheba byu:-mhŃ           pasa  
1-DAT money   give/IMPERF/SET2-NOM   pasa  
"The friend who gave me the money..."

The suffix -pĩ: occurs with plural animate head nouns. Again, the choice of inflection is determined by the interaction of Control and Epistemic Source.

- (50)       ji:    dheba biy-a-pĩ:           mijan-to  
1/ERG money   give-PST/SET1-NOM   man-PLUR  
"The men to whom I gave the money..."
- (51)       chŃ:   dheba byu:-pĩ:           mijan-to  
2/ERG money   give/IMPERF/SET2-NOM   man-PLUR  
"The men to whom you gave the money..."



- (52)       ji-tO dheba byu:-pī:                               mijan-tO  
           1-DAT money give/IMPERF/SET2-NOM man-PLUR  
           "The men who gave me the money..."

### Nominalizations

Nominalized clauses occur as complements of copula-like verbs (e.g., khO(t)- 'be/be.true', dO(t)- 'be/be.at'), perception verbs (e.g. khOn- 'see', swo(l)- 'watch', ta(l)- 'hear'), and in subordinate/adverbial constructions. In addition, nominalized clauses may occur in certain discourse environments as "non-embedded" nominalizations. As with attributive clauses, the aspectual contrast in SET2 is neutralized. The suffix -qu marks the nominalization.

For example, nominalization occurs with complements of the verb dO(t)- 'be/be.at' to indicate a kind of "perfect" or "current relevance" tense/aspect. In the complement clauses, the SET1/SET2 opposition occurs as a function of the interaction of Control and Epistemic Source.

- (53)       ji       chē: con-a-gu                               du  
           1/ABS house stay-PST/SET1-NOM be/IMPERF/SET2  
           "I've stayed home."
- (54)       chO       chē: cō:-gu                               du  
           2/ABS house stay-IMPERF/SET2-NOM be/IMPERF/SET2  
           "You've stayed home."
- (55)       laxmi chē: cō:-gu                               du  
           Laxmi house stay-IMPERF/SET2-NOM be/IMPERF/SET2  
           "Laxmi has stayed home."

Again, when the verb is a Non-Control verb, the SET1/SET2 opposition is neutralized and only SET2 is possible.

- (56)       ji               thyō:-gu                               du  
           1/ABS       arrive/IMPERF/SET2-NOM be/IMPERF/SET2  
           "I have arrived."

- (57)        chO            thyŌ:-gu                    du  
              2/ABS        arrive-IMPERF/SET2-NOM   be/IMPERF/SET2  
              "You have arrived."
- (58)        Laxmi        thyŌ:-gu                    du  
              Laxmi/ABS   arrive/IMPERF/SET2-NOM   be/IMPERF/SET2  
              "Laxmi has arrived..."

More interestingly, these nominalized clauses may occur in "non-embedded" environments, typically in questions or as "background" or "presupposed" information.<sup>4</sup> The same opposition between SET1 and SET2 applies. In the first set of examples, the actor and the Epistemic Source are coreferential; hence, SET1 occurs.

- (59)        chO    gOnŌ:        woy-a-gu  
              2/ABS where-ABL come-PST/SET1-NOM  
              "Where have you come from?"
- (60)        jI:    athē    yan-a-gu  
              1/ERG just    do-PST/SET1-NOM  
              "I just did it (for no apparent reason)."

When the actor and the Epistemic Source are not coreferential, SET2 is required.

- (61)        laxmi chae        pihā    wō:-gu  
              Laxmi why        out    go/IMPERF/SET2-NOM  
              "Why has Laxmi gone out?"

In concluding this section it is important to note the following:

1. In simple finite clauses the SET1/SET2 distribution exhibits the full range of paradigmatic oppositions.
2. In attributive clauses and nominalizations the aspectual contrast between the SET2 Perfective and Imperfective is neutralized.
3. Despite this neutralization of the aspectual contrast, the opposition between SET1 and SET2 is maintained. The choice

of inflectional form is determined via the interaction of (+/-) Control and (+/-) Epistemic Source.

### Verb-Auxiliary Constructions

The SET1/SET2 opposition occurs in simple clauses, in attributive clauses and nominalizations, and a complex clause construction which I will term the Verb-Auxiliary Construction.<sup>5</sup>

Verb-Aux constructions are essentially verb concatenations in which an otherwise independent verb takes on an auxiliary function indicating directional, aspectual, and other auxiliary concepts whenever it occurs second in a verb concatenation with a VERB-a form (Hargreaves 1986a; Malla 1985). The first verb in the concatenation is the semantic head, subcategorizes the core arguments in the clause, and occurs in the invariant VERB-a form. The final (auxiliary) verb in the concatenation may introduce oblique arguments (such as benefactives) or simply elaborate the directional and aspectual properties of the main verb. As the final verb in the clause, it realizes the inflection for the clause. Thus, while it is the lexical category of the main verb as Control or Non-Control which determines the potential for SET1/SET2 inflection forms, the forms are realized on the final, auxiliary verb.<sup>6</sup>

For example, the verb con- 'stay, remain' is a Control verb.

- (62)           ji               yolo-e    con-a  
          1/ABS           Yala-LOC stay-PST/SET1  
          "I stayed in Yala (Patan)."
- (63)           wo               yolo-e    con-O  
          3/ABS           Yala-LOC stay-PERF/SET2  
          "S/he stayed in Yala (Patan)."

However, the verb con- 'stay' functions as a progressive aspect auxiliary in Verb-Aux constructions. In the first set of examples below, the first verb appears as the invariant form won-a 'go'. The gloss CM indicates the functional role as the Concatenation Marker in the Verb-Aux construction. The auxiliary verb con- 'stay, remain' realizes the finite inflection.

- (64)       ji       yOlO-e   won-a   con-a  
           1/ABS Yala-LOC go-CM   stay-PST/SET1  
           "I was/am going to Yala (Patan)."
- (65)       wo       yOlO-e   won-a   con-O  
           3/ABS Yala-LOC go-CM   stay-PERF/SET2  
           "He was/is going to Yala (Patan)."

It is important to note that, although the auxiliary verb carries the finite inflection for the clause, it is the status of the first verb (Control/Non-Control) which triggers inflection on the auxiliary verb; for this reason, we may refer to the first verb as the "main" verb. In the example below, the Fluid verb ju(1)- 'become' and the Non-Control verb tyanu(1)- 'be.tired' are given Non-Control interpretations.<sup>7</sup> Consequently, in the Verb-Aux constructions the auxiliary verb takes SET2 inflection.

- (66)       ji           birami   jul-O  
           1/ABS       ill       become-PERF/SET2  
           "I became sick."
- (67)       ji           birami   juy-a       con-O  
           1/ABS       ill       become-CM   stay-PERF/SET2  
           "I am/was feeling sick."
- (68)       ji           tyanul-O  
           1/ABS       be.tired-PERF/SET2  
           "I became tired."
- (69)       ji       tyanuy-a       con-O  
           1/ABS be.tired-CM   stay-PERF/SET2  
           "I am/was feeling tired."

In contrast, Control main verbs trigger SET1/SET2 alternations depending on the assignment (+/-) Epistemic Source. Note also that case assignment is subject to pragmatic variables here. Ergative case, assigned by the main verb ya(t)- 'do', marks agent focus; Absolutive case, assigned by the auxiliary verb con- 'stay, remain', marks non-agent or event focus.

- (70)       ji:       jya yan-a  
          1/ERG work do-PST/SET1  
          'I worked.'
- (71)       ji(ji:)       jya yan-a con-a  
          1/ABS(ERG) work do-CM stay-PST/SET1  
          'I was doing some work.'
- (72)       chō:       chu yan-a  
          2/ERG what do-PST/SET1  
          'What did you do?'
- (73)       chō(chō:)       chu yan-a con-a  
          2/ABS(ERG) what do-CM stay-PST/SET1  
          'What are you doing?'
- (74)       wō:       chu yat-O  
          3/ERG what do-PERF/SET2  
          'What did he do?'
- (75)       wō(wō:)       chu yan-a con-O  
          3/ABS(ERG) what do-CM stay-PERF/SET2  
          'What's s/he doing?.'

The politeness auxiliary di- is another example of a verb which occurs in Verb-Aux constructions. In its auxiliary usage, it marks a respect form in questions, typically occurring as a "nonembedded" nominalization. The verb bon- 'to read' is a Control verb.

- (76)       ji:   sōphu:       bon-a  
          1/ERG book       read-PST/SET1  
          'I read a book.'
- (77)       ji(ji:)       sōphu:       bon-a       con-a  
          1/ABS(ERG) book       read-CM stay-PST/SET1  
          'I am/was reading a book.'

- (78)        chĩ:        chu bon-a diy-a-gu        le  
              2/RSP/ERG what read-CM sit-PST/SET1-NOM RESP  
              "What did you read?" (or "What are you reading?")
- (79)        week0:-nŏ chu bon-a diu:-gu        le  
              3/RESP-ERG what read-CM sit/IMPERF/SET2-NOM RESP  
              "What did he read?" (or "What is he reading?")

Inflection on the auxiliary verb also indexes logophoric reference in reported speech. In the examples below, mhit(Ōl)- 'play' is a Control verb.

- (80)        wŏ:    ta:s        mhit-a con-a        hŏ  
              3/ERG cards        play-CM stay-PST/SET1 EVD  
              "He<sub>i</sub> said that he<sub>i</sub> is playing cards."
- (81)        wŏ:    ta:s        mhit-a con-Ō        hŏ  
              3/ERG cards        play-CM stay-PERF/SET2 EVD  
              "It's said that s/he is playing cards."

The distribution of SET1/SET2 forms in Verb-Aux constructions is summarized as follows:

First, finite inflection is marked on the clause final auxiliary verb. The semantic head verb is marked with an invariant form, VERB-a. Second, the semantic head carries the features Control or Non-Control. With Non-Control verbs, SET2 is obligatory. Third, inflection with Control verbs exhibits the same distribution as in simple clauses.

### Infinitive Constructions

tɛn- 'get ready/be ready'

SET1/SET2 inflection in complex clauses is not confined to Verb-Aux constructions. For example, the aspectual verb tɛn- 'get ready/be ready' takes clausal complements marked with the invariant form VERB-e.<sup>8</sup> As the final verb in the clause, it manifests the SET1/SET2 opposition.<sup>9</sup>

- (82)       ji               won-e           ten-a-b0l0e  
           1/ABS           go-INF          ready-PST/SET1-when  
           "As I was getting ready to go..."
- (83)       ch0           won-e    ten-a-gu                    la  
           2/ABS           go-INF   ready-PST/SET1-NOM Q  
           "Are you getting ready to go?"
- (84)       ch0   won-e    tyŃ:-b0l0e  
           2/ABS go-INF    ready/IMPERF/SET2-when  
           "When you were getting ready to go..."
- (85)       laxmi           won-e    tyŃ:-b0l0e  
           Laxmi/ABS go-INF    ready/IMPERF/SET2-when  
           "When Laxmi was getting ready to go..."

Verbs which are Non-Control can only take SET2 inflection.  
 In the example below, bu(t)- 'to lose (in a contest)' is a Non-Control verb.

- (86)       ji               but-0  
           1/ABS           lose-PERF/SET2  
           "I lost (in the game)."
- (87)       ji               bu-e           ten-0  
           1/ABS           lose-INF       ready-PERF/SET2  
           "I was about to lose."

Again logophoric reference is marked on the final verb.

- (88)       wŃ:           n0-e    ten-a                   hŃ  
           3/ERG           eat-INF   ready-PST/SET1 EVD  
           "S/he<sub>i</sub> said that s/he<sub>i</sub> is about to eat."
- (89)       wŃ:           n0-e    ten-0                   hŃ  
           3/ERG           eat-INF   ready-PERF/SET2   EVD  
           "It's said that s/he's is about to eat."

The distribution of inflectional forms with the verb ten- 'get.ready/be.ready' is as follows. We return to infinitive complements of aspect/modality verbs in Chapter VII:

1. Inflection is marked on the final main verb;  
 complement verbs are marked with an invariant infinitive form,  
VERB-e.
2. With Non-Control complement verbs, ten- requires SET2  
 inflection.

3. With Control verbs, the distribution of inflectional forms is the same as simple finite clauses.

Finally, note that the majority of the verbs which take infinitive complements are Non-Control verbs and thus require SET2 inflection regardless of the semantic class of the complement verb or the discourse role (+/-) Epistemic Source. In the set of examples below, the verb phO(t)- 'be.able' is a Non-Control verb which takes infinitive complements. Although won- 'go' is a Control verb, SET2 is obligatory.

- (90)        ji                won-e            phu:  
             1/ABS            go-INF          able/IMPERF/SET2  
             "I am able to go."
- (91)        chO                won-e            phu:  
             2/ABS            go-INF          able/IMPERF/SET2  
             "You are able to go."
- (92)        laxmi            won-e            phu:  
             Laxmi/ABS    go-INF          able/IMPERF/SET2  
             "Laxmi was able to go."

#### Summary: The Distribution of Inflectional Forms

First, there are two major lexical classes of verbs, Control and Non-Control. In addition, there is a class of Fluid verbs which allow both intentional and non-intentional interpretations.

Second, with Non-Control verbs, SET2 is obligatory. With Control verbs, SET1 inflection occurs in first person declarative clauses, second person interrogative clauses, and third person logophoric environments. In other words, SET1 occurs with Control verbs whenever the Epistemic Source and the actor of a Control verb are co-referential.



Third, the SET1/SET2 contrast is not confined to simple clauses. It occurs in attributive clauses and nominalizations, where the SET2 Perfective/Imperfective opposition is neutralized. Also, it occurs with Verb-Aux constructions and certain verbs taking Infinitive complements.

### Intentional Action and Epistemic Source

As part of their inherent semantics, verbs can be classified as either Control, Non-Control or Fluid. Although there is an intermediate Fluid class which allows for either intentional or non-intentional interpretation, since the inflectional opposition is binary, any finite first person declarative clause indicates either an intentional or non-intentional action.

The speech participant roles for speaker and addressee in Declarative and Interrogative clauses are characterized in binary terms as (+/-) Epistemic Source. In declarative contexts, the Epistemic Source (ES) in the speech event is assumed by the speaker, unless otherwise annotated via evidential operators such as the reported speech hō. In interrogative contexts, the Epistemic Source is attributed to the addressee. As a discourse role, (+/-) Epistemic Source is typically associated with a referent under the contexts diagrammed below:

	DECLARATIVE	INTERROGATIVE
Speaker	+ES	-ES
Addressee	-ES	+ES

In reported speech, Epistemic Source is assigned by the reported speech evidential represented below by the gloss 'EVD'

for Evidential. SET1 occurs when the Epistemic Source and the actor are coreferential.

[ NP<sub>i</sub> [ VERB-SET1 ] ] {ES<sub>i</sub>}EVD

SET2 occurs when the Epistemic Source and the actor/subject are not coreferential.

[ NP<sub>i</sub> [ VERB-SET2 ] ] {ES<sub>j</sub>}EVD

The values for the two domains, Control, Non-Control, Fluid and (+/-) Epistemic Source, are assigned independently. By themselves neither domain accounts for the distributions in the inflectional paradigm. Instead, the interaction of the two domains determines the distribution of inflectional forms. In the diagram below, (+/-) CV stands for (+/-)Control and (+/-) ES stands for (+/-) Epistemic Source. Person is indicated in the left most column. The two domains of Control and Epistemic Source interact as follows:

	+Control		-Control	
	Declarative	Interrogative	Declarative	Interrogative
1	<u>+CV</u> <u>+ES</u>	+CV -ES	-CV +ES	-CV -ES
2	+CV <u>-ES</u>	<u>+CV</u> <u>+ES</u>	-CV -ES	-CV +ES
3	+CV -ES	+CV -ES	-CV -ES	-CV -ES

The co-occurrence of positive values (underlined) parallels exactly the observed distribution of SET1 forms and represents the non-default value. However, it is important to emphasize that verb semantics and epistemic source are independent of one another. The categorization of verb types is semantically based on concepts rooted in an understanding and categorization of events and action types in the world. On the other hand, epistemic source is a function of the speech event roles and discourse authority, independent of the verbal semantics and

action/event types. It is based on the interactionally determined relationship between the participants, speaker and addressee, and the information.

Since the two domains are distinct, there is no inherent motivation for why the two domains should interact such that the co-occurrence of positive values is indexed by SET1 forms, whereas all other combinations correlate with SET2 distribution. It is possible, of course, to simply stipulate that these marked distributions occur just in case the (+)Control and (+)Epistemic Source co-occur, but a more intuitively appealing account can be proposed.

As the previous works on Newari inflection have shown, SET1 forms index an intentional action whenever there is no evidential constraint on the attribution of intention (Hale 1980; Bendix 1973; to appear). In this study, I will argue that the conceptual structure for intentional action has two parts:

1. The actor has a unique internal state or mental plan.
2. The actor initiates force or movement in accordance with this internal state or plan.

Thus, SET1 is felicitous only when the person to whom the internal state or awareness is being attributed is also the Epistemic Source. In other words, there is a basic evidential restriction on the attribution of the internal state of intention. It can only be attributed to the person who is in the discourse role of Epistemic Source.

Epistemic Source is a property of discourse pragmatics and the roles of speaker and addressee. It is determined within an interactional setting, emerging as the discourse role which

assumes the epistemic authority for some proposition. The discourse roles are indexed via the oppositions in pronominal reference (person) and speech act modality (statement/question).

Control, on the other hand, is a semantic property associated with the lexical properties of verbs and the notion of self-initiated action. The next chapter, Chapter III, begins to examine the issue of intentional action in more detail, in order to understand what exactly it means to attribute intentional action to an individual in situated interaction.

### Notes

<sup>1</sup>Following usages in Foley and Van Valin (1984) and Merlan (1985), I am using the term "Fluid" for the class of verbs which admit an inflectional opposition marking the presence or absence of "intention" or "volitionality" for the action being described.

<sup>2</sup>The morphophonemics of Newari verb inflection are described in several works (Hale 1973; Joshi 1985; 1988a; Kanskar 1982; Malla 1985; Shrestacarya 1981). The contrast between SET1/PST -a and SET2/PERF -O is accompanied by morphophonemic changes in the stem final consonant. There are four major inflectional classes:

	SET1/PST	SET2/PERF	INfinitive
Class 1	CVn-a	CVn-O	CVn-e
Class 2	CVn-a	CVt-O	CV-e
Class 3	CVy-a	CVl-O	CV-e
Class 4	CVl-a	CVl-O	CVl-e

As a citation form, I will use the infinitive stem with brackets CV(t)- or CV(l)- to distinguish class 2 from class 3 verbs. In this study the grapheme O stands for the low back, "open o" vowel.

Note also that the SET2 Imperfective suffix -u appears simply as stem vowel lengthening in all environments except when it follows the high front vowel /i/ (see Genetti 1990). Following conventional formats such as Malla (1985), I will not segment the Imperfective verb forms, but simply indicate the long vowel. However, I depart from conventional terminology by glossing the verb form as VERB/IMPERF/SET2. The Imperfective form is usually called the Stative or Habitual form.

<sup>3</sup>Absolutive forms are zero forms. I will not mark or gloss them in the examples except when it is important for the discussion.

<sup>4</sup>The exact characterization of the discourse environment is complex and beyond the scope of our discussion here (cf Hale (1985)).

<sup>5</sup>There have been a number of terms used to refer to the morphological forms and grammatical functions of both the finite and non-finite verbs.

Hale's (1973) seminal work on Newari verbal morphology refers to the A: form as having a (finite) past tense and a gerundive function. Hale (1980) and Shresthacharya (1981) use the terms "past conjunct" for the finite function. Kanskar (1982) refers to the "past conjunct form" as a cover term for the morphophonemic classification. Malla (1985) uses the term "gerundive" for the non-finite environment and "past conjunct" for the finite environment.

Kölver (1976), with characteristic clarity, distinguishes the function/form mapping "preterite absolutive in -a" from the

function/form mapping "preterite conjunct in -a" , referring to both environments as manifesting the -A form.

Hargreaves (1986a; 1986b), refers to the non-finite formation as a "multi-verb construction" and refers to the finite -a form as the "past conjunct" form and the non-finite form -a as a "concatenation marker." Genetti (1988) uses the term "participle" for the non-finite -a form.

The variation in terminology arises for several reasons. First, at the morphophonemic level, there is no distinction between the verb form realizing the finite (SET1) past function and the non-finite function in the Verb-Auxiliary construction. In both environments, the suffix -a is affixed to the verbal stem, with stem alternations occurring relative to the morphological class of the verb. Thus, there is the need to identify a single morphological form of the verb. When referring to morphological shapes, independent of function, I will simply use the label: VERB-a.

The second source of confusion is the formal similarity between two non-finite functions: Verb-Auxiliary function and clause chaining (or non-final) function (cf. Hale 1985; Hargreaves 1986; Genetti 1988). Verb forms in clause chaining constructions are VERB-a forms plus a lengthened final vowel i.e., VERB-a > VERB-a:. Malla (1984) uses the terms "gerundive" for the short form and "participle" for the lengthened form; Hargreaves (1986b) uses the terms CM "Concatenation Marker" for the short form and NE "Non Final" for the long form. Genetti (1988) uses the term "participle" for the short form and NE "Non-Final" for the long form.

As already noted, in this study, I will use the terms SET1/SET2 for the contrastive distribution of forms in finite environments; the glossing SET1/SET2 is combined with the Tense/Aspect gloss for that form. Although I will not argue it here, the Newari non-finite functions bear little resemblance to the Latin or English grammatical concepts of "gerundive" and "participle"; thus, it seems inappropriate to invoke the Latinate categories "gerundive" and "participle" for the non-finite functions which can be more descriptively referred to as the "Verb-Auxiliary construction" and the "Clause chaining construction." Consequently, I will continue to gloss the non-finite VERB-a form as CM for "Verb-Auxiliary Concatenation Marker" and the long form VERB-a: in chaining constructions as NE for "Non-Final in Clause Chain."

<sup>6</sup>Nothing crucial to this study depends on the analysis of main and auxiliary status for the two verbs in the Verb-Aux construction. They are used simply as convenient labels.

<sup>7</sup>tyanu(1)- 'be.tired' and other adjective-like predicates, including the color predicates, admit all Non-Control inflectional possibilities. Hence, I will refer to them as verbs (cf. Shrestacarya 1981).

<sup>8</sup>The infinitive form -e is homophonous with the SET1 Non-Past form.

<sup>9</sup>The temporal subordinating suffix -bO10e 'when' triggers the same inflectional distribution as the nominalizer -gu. That is, the SET2 Perfective/Imperfective opposition is neutralized.

## CHAPTER III

## GRAMMATICAL REFLEXES OF THE CONCEPT

## "INTENTIONAL ACTION"

This chapter considers in more detail the semantic conditions underlying the distinction between intentional and non-intentional actions. More specifically, it examines the lexical properties of the three verb classes--Control, Non-Control, and Fluid--in relation to a range of lexical and morphosyntactic environments which condition the opposition between SET1/SET2 forms. Since the goal here is to isolate the conceptual structure of intentional action apart from its interaction with discourse roles and Epistemic Source, the data will be primarily restricted to first person declarative clauses.

The data examined in this chapter suggest the following: The conceptual structure of intentional action in Newari can be seen as involving two distinct, but related, domains. First, for the action described in the clause, the actor has a unique mental state or plan associated with the action. Second, the actor initiates a force or motion in accordance with the mental state or plan. The plan and the force together serve as the proximate causal antecedent of the intentional action described in the clause. To anticipate Chapter IV, the two domains will be referred to as the representational domain and the force dynamic.



Chapter II showed the distinction between Control, Non-Control, and Fluid verb types. The verb classes were defined relative to the distribution of SET1 and SET2 inflectional forms in first person declarative clauses. In notional terms, the opposition (+/-) Control was identified as essentially a distinction between self-initiated and non-initiated events. In this chapter, we look at the verb classes in more detail and make explicit the criteria for identifying the relevant lexical properties of verbs.

After looking in some detail at the verb classes, we then turn to three other areas of the grammar in which an apparent opposition between "intentional" and "non-intentional" action has grammatical reflexes.

In the first construction, we consider the use of two verbs, ya(t)- 'do' and ju(l)- 'become, happen', functioning as verbal proforms. In this case, the choice of which verb is used as the proform corresponds roughly to a distinction between whether the antecedent event is viewed as a "doing" or as a mere "happening." This lexical distinction between "do" and "become" corroborates, on the one hand, the distinction between Control and Non-Control verbs, and on the other hand, the distinction between SET1 (intentional) and SET2 (non-intentional) interpretations of Fluid verbs.

In the second construction, intentional actions are expressed in a periphrastic construction with a quoted speech complement clause and a simple declarative main clause. In this construction, intentional action is inferred when a plan of action expressed in quoted speech is grammaticalized as an

"intent" or "purpose" complement of an action expressed in the main clause. This construction describes "premeditation," in which the actor mentally plans, or is in some way conscious of, the action. However, "premeditation" is distinguished from "intention-in-action."

Finally, in the third construction, a derivational form of the verb ca(1)- 'feel, sense, be aware of' functions as an adverbial modifier meaning roughly "consciously" and, by implication, "intentionally" (Manandhar 1986). In its negative form, it is interpreted roughly as "unconsciously." Examining its distribution relative to the use of SET1 and SET2 forms, reveals that some notion of a unique "mental state" is a necessary feature of the concept of intentional action as indexed by SET1 forms.

### Verb Classes

#### Control Verbs

Control verbs are defined operationally as those verbs which may occur with SET1 forms in first person declarative clauses. Notionally, the kinds of actions described by Control verbs are those actions which are viewed as prototypically involving self-initiated action. Control verbs can only occur with SET2 forms whenever the appropriate evidential operators are present, indicating that the speaker did not have the appropriate mental state associated with his/her action.<sup>1</sup>

For example, recall the use of SET2 forms with the reported speech evidential hō. In the example below, the simple

clause (without the evidential operator) occurs with SET1 inflection. The verb ton- 'drink, smoke' is a Control verb. With the evidential operator hō, the SET2 form is obligatory.

- (1)           jī:    ō:pwō       ton-a  
               1/ERG alot       drink-PST/SET1  
               "I drank too much."
- (2)           jī:    ō:pwō       ton-O                   hō  
               1/ERG alot       drink-PERF/SET2 EVD  
               "It's said that I drank too much."

There is another evidential operator, khOnisa 'appears, seems', which also indexes a disjunction between the speaker and his/her direct knowledge of the intentional action. It appears clause finally and indicates that the event or action is inferred via its result, rather than directly. In first person declarative clauses, the speaker is indicating that his/her own action is inferred from a result; hence, it entails a lack of awareness at the time of the action.

Examples (3) and (4) illustrate the normal distribution of SET1/SET2 forms with the transitive Control verb caphu(t)- 'snap, break (transitive).'

- (3)           wō:    ka       caphut-O  
               3/ERG thread snap-PERF/SET2  
               "S/he snapped/broke the thread."
- (4)           jī:    ka       caphun-a  
               1/ERG thread    snap-PST/SET1  
               "I snapped/broke the thread."

With khOnisa, only the SET2 form is possible. The use of khOnisa is generally incompatible with the SET1 form.

- (5)           wō:    ka       caphut-O                   khOnisa  
               3/ERG thread snap-PERF/SET2           it.appears  
               "It appears that s/he snapped/broke the thread."

(6)           ji:   ka       caphut-O           khOnisa  
               1/ERG thread snap-PERF/SET2       it.appears  
               "It appears that I snapped/broke the thread."

(7)\*           ji:   ka       caphun-a           khOnisa  
               1/ERG thread   snap-PST/SET1       it.appears

The use of khOnisa indicates an inferred result. In example (5), the speaker is indicating that s/he was not a direct witness of the action, only its result. With the first person clause in (6), the interpretation suggests that the speaker initiated and performed an action, realizing subsequently that s/he broke the string. In other words, the speaker performed an action, but the action being described was not in accordance with the plan or mental state appropriate for that action.

In the next pair of examples, with the verb ton- 'drink, smoke' the SET2 interpretation with khOnisa suggests the absence of awareness due to intoxication. Notice again that the interpretation assumes that the speaker did drink, and was not forced to do so. In other words, the actor's self-initiated behavior is still the proximate causal antecedent for the action. What is lacking is the appropriate form of a mental plan or self-awareness.

(8)           ji:   O:pwO       ton-a  
               1/ERG alot       drink-PST/SET1  
               "I drank too much."

(9)           ji:   O:pwO       ton-O           khOnisa  
               1/ERG alot       drink-PERF/SET2   it.appears  
               "It appears that I drank too much."

Again, the SET1 form is generally incompatible with the use of khOnisa.

(10)\*          ji:   O:pwO       ton-a           khOnisa  
               1/ERG alot       drink-PST/SET1   it.appears

Thus, verbs in the Control class occur with SET1 in simple first person declarative clauses. Control verbs occur with SET2 only when appropriate evidential operators are present. The evidential operators indicate that the appropriate form of awareness or mental plan was absent during the performance of the action being described in the utterance.

Semantic subgroups of the Control type include the transitive and di-transitive actions listed below:

da(l)-	'hit'	sya(t)-	'kill'
chu(l)-	'roast'	tya(t)-	'mince, dice'
pal-	'chop, axe'	dhen-	'cut, saw'
jon-	'grab'	ya(t)-	'do'
no(l)-	'eat'	ton-	'drink'
co(l)-	'write, draw'	bon-	'read'
to(l)-	'put'	ko(l)-	'take'
bi(l)-	'give'	chwo(l)-	'send'
thu(l)-	'cook'	sil-	'wash, rinse'

Other Control verbs include intransitive verbs of motion, posture, and behavior:

won-	'go'	wo(l)-	'come'
bwa(t)-	'run'	khō lha(t)-	'talk'
di(t)-	'stop'	nhu(l)-	'step'
dOn-	'stand'	den-	'lie'
con-	'stay, remain'	mun-	'gather(intr)'
kwo=chu(l)-	'bend, stoop'	mu=pul-	'turn over'
lal=ka(l)-	'swim'	ca=hil-	'walk around'
go(l)-	'ascend, mount'	mhit(ol)-	'play'
lhu(t)-	'dance'	hal-	'shout, sing'
khwo(l)-	'cry, weep'	nhil-	'laugh'

The majority of verbs indicating bodily functions are Control verbs. Although some of the actions seem potentially beyond self-control, they are syntactically transitive, using transitive Control verbs, like to(l)- 'put' or pha(t)- 'separate, let go':

cwo pha(t)-	'urinate'	khi pha(t)-	'defecate'
i: pha(t)-	'spit'	khi tO(l)-	'fart'
hiku tO(l)-	'hiccup'	lho(t)-	'vomit'
dhOkka: tO(l)-	'belch'	hachika: tO(l)-	'sneeze'

### Fluid Verbs

In contrast with Control verbs, which require an evidential operator in order to occur with a SET2 form, Fluid verbs are defined operationally as those verbs which occur with either SET1 or SET2 forms without requiring evidential operators. Furthermore, there is another important difference between Control and Fluid verbs. With Control verbs, SET1 and SET2 forms are interpreted relative to the evidential criteria. In other words, Control verbs describe actions that entail that the actor actually initiated the force dynamic which characterizes action. The function of inflection is to indicate the speaker's mental plan, or state of mind with respect to the action.

However, with Fluid verbs, SET1 and SET2 forms are interpreted relative to slightly different criteria. SET1 forms are interpreted as indicating both the actor's mental state and self-initiated force. SET2 forms indicate that the speaker neither planned nor initiated the action. Notionally, Fluid verbs describe actions which are not prototypically viewed as either "intentional" or "non-intentional."

For example, the verb thi(l)- 'touch' is a Fluid verb occurring with both SET1 and SET2 forms. The SET1 form indicates a behavior both planned and initiated by the speaker; the SET2 form indicates an event neither planned nor initiated. No evidential operators are necessary when using the SET2 form.

(11)       ji:   ja       thiy-a  
           1/ERG rice   touch-PST/SET1  
           "I touched the rice (self-initiated)."

(12)       ji:   ja       thil-O  
           1/ERG rice   touch-PERF/SET2  
           "I touched the rice (non-initiated)."

The verb thwa(t)- 'kick, bump with foot' is also a Fluid verb, allowing both intentional and non-intentional interpretations without evidential operators.

(13)       ji:   wo-yatO   thwan-a  
           1/ERG 3-DAT   kick-PST/SET1  
           "I kicked him/her." (self-initiated)

(14)       ji:   wo-yatO   thwat-O  
           1/ERG 3-DAT   kick-PERF/SET2  
           "I bumped him/her." (non-initiated)

There is significant variation among speakers as to which verbs are acceptable as Fluid verbs. For example, there is no non-arbitrary way to assert that actions such as "crying" or "laughing" are done "intentionally" or "non-intentionally." Nevertheless, most of the speakers I have consulted do not generally accept the behavior verbs like nhil- 'laugh' and khwo(l) 'cry, weep' occurring with the SET2 form unless some evidential operator is present in the clause. In this sense, they are distributionally defined as Control verbs. A few speakers, however, do find the SET2 form acceptable without an evidential operator, in which case it elicits a non-intentional interpretation. By this definition, it is distributionally a Fluid verb.

(15)       ji       nhil-a  
           1/ABS laugh-PST/SET1  
           "I laughed"

(16)?       ji       nhil-O  
           1/ABS laugh-PERF/SET2  
           "I laughed" (non-initiated)

- (17)           ji       nhil-O                   hō  
               1/ABS laugh-PERF/SET2       EVD  
               "It's said that I laughed"

More interestingly, most of the speakers I consulted allow Fluid usage, i.e., both SET1 and SET2 forms, with the verb ju(1)- 'become, happen' if it occurs with nominal predicates that plausibly admit intentional interpretations.

Thus, daktOr ju(1)- 'become a doctor' is acceptable with the SET2 form where the interpretation is comparable to English "I was made a doctor" or "It came to pass that I was a doctor":

- (18)           ji       dOktOr jul-O  
               1/ABS doctor become-PERF/SET2  
               "I became a doctor." (non-initiated)

The SET1 form is also acceptable with the interpretation "I worked to become a doctor."

- (19)           ji       dOktOr juy-a  
               1/ABS doctor become-PST/SET1  
               "I became a doctor." (self-initiated)

At the same time, speakers found gOjOb ju- 'become surprised' acceptable with SET2:

- (20)           ji       gOjOb       jul-O  
               1/ABS surprise become-PERF/SET2  
               "I became surprised."

but unacceptable with SET1.<sup>2</sup>

- (21)??       ji       gOjOb       juy-a  
               1/ABS surprise become-PST/SET1  
               "I became surprised." (self-initiated)

Also fitting into this class is the verb ca- 'feel, sense, be aware of.' For example, in combination with a nominal form like tō 'anger', the SET1 form is strongly preferred over the SET2 form.

- (22)           ji           tō       cay-a  
               1/ABS       anger   feel-PST/SET1  
               "I got angry."



- (23)??      ji            tō      cal-O  
              1/ABS        anger feel-PERF/SET2  
              "I felt anger."

In combination with a nominal form like Oju 'surprise', not all speakers seemed to accept the SET1 form. Some speakers found it perfectly acceptable; others did not.

- (24)        ji            Oju        cal-O  
              1/ABS        surprise feel-PERF/SET2  
              "I felt surprised."
- (25)?        ji            Oju        cay-a  
              1/ABS        surprise feel-PST/SET1  
              "I felt surprised."

In a dative subject construction, the SET1 form is completely unacceptable to all speakers; the SET2 form is required.

- (26)        ji-to        sekhō    cal-O  
              1-DAT        cold    feel-PERF/SET2  
              "I caught a cold."
- (27)\*        ji-to        sekhō    cay-a  
              1-DAT        cold    feel-PST/SET1

Taking these markedness properties and variable judgements into consideration, it turns out that when we define the Fluid class as just those verbs which allow both SET1 and SET2 forms without evidential operators, the class of "true" Fluid verbs is actually quite small. They are primarily intransitive verbs with motion components which may or may not be self-initiated (the "roll" class), transitive verbs with alternations between telic and non-telic interpretations (the "touch" class), and perception verbs with active or non-active interpretations. The list of Fluid verbs I have found is given below:

#### Roll Type

gwara tul- 'roll over'  
 sOn- 'move'  
 kha(t)- 'shake, tremble'  
 dun- 'submerge, dip'

#### Touch Type

thi(l)- 'touch'  
 napO=la(t)- 'meet'  
 ghwa(t)- 'elbow, bump'  
 thwa(t)- 'kick, bump'

Other		Perception Type	
ca(1)-	'feel'	ta(1)-	'hear'
ju(1)-	'become'	khOn-	'see'

### Non-Control Verbs

The Non-Control verbs make up the largest class for the simple reason that, whereas Control and Fluid verbs require an entity that can potentially plan and initiate actions as well as speak about the actions as first persons, Non-Control verbs have no such restrictions. Thus, the majority of the Non-Control verbs have inanimate subjects. In operational terms, Non-Control verbs are defined as those verbs which take only SET2 inflection in finite clauses.

Unlike Control and Fluid verbs, Non-Control verbs do not admit SET1 forms with intentional interpretations.

- (28)\*       ji     gyan-a  
              1/ABS be.afraid-PST/SET1
- (29)        ji     gyat-O  
              1/ABS be.afraid-PERF/SET2  
              "I became afraid."

The majority of the Non-Control verbs that take animate subjects do not even marginally admit intentional interpretations.

- (30)\*       ji     pyan-a  
              1/ABS be.wet-PST/SET1
- (31)        ji     pyat-O  
              1/ABS be.wet-PST/SET2  
              "I became wet."

An acceptable alternative for an intentional interpretation would be with the causative suffix -k- and a reflexive pronoun. The causative suffix inflects like a Control verb. We

return to the interpretation of reflexive and middle-voice constructions in Chapter VII.

- (32)       ji:     (thO:-yatO)     pya-k-a  
               1/ABS (self-DAT)     be.wet-CAUS-PST/SET1  
               "I got (myself) wet."

As the list below indicates, the majority of the Non-Control verbs are intransitive:

tOn-	'be.lost	gya(t)-	'be.afraid'
sya(t)-	'hurt'	bu(t)-	'be.defeated'
gOn-	'be.dry'	lhwon-	'be.fat'
ga(t)-	'be.sufficient'	gu(t)-	'tear' (intrans)
pu(t)-	'be.hot'	phu(t)-	'be.used up'
pya(t)-	'be.wet'	bu(t)-	'be.cooked'
ja(l)-	'be.full'	sa(t)-	'be.tasty'
sul-	'be.hidden'	jwo(l)-	'be.sharp'
lu(t)-	'be.found'	ben-	'be.loose'
na(l)-	'melt'	la(l)-	'recover, heal'
bwo=lOn-	'mature'	gi(t)-	'be.overripe'
jel-	'wear out'	wa(t)-	'spill'
cya(t)-	'ignite, burn'	ca(l)-	'open'
then-	'arrive'	tO=jya(t)-	'break, shatter'
ca=bu(t)-	'snap (string)'	twO=du(l)-	'snap (stick)'
dun-	'collapse'	dwOn-	'err'
tya(t)-	'succeed, gain'	si(t)-	'die'
kutū won-	'fall.go'	kutū wo(l)-	'fall.come'

The transitive Non-Control class are mainly cognition verbs which assign Ergative case:

si(l)-	'know'	mhOsi(l)-	'know (person)'
thu(l)-	'understand'	mhOn-	'dream'
lumOn-	'remember'	lwomOn-	'forget' <sup>3</sup>

### Summary of Verb Classes

By using first person declarative clauses as our test environment, it turns out that the class of Fluid verbs is actually quite small. The essential lexical opposition is between two classes of verbs (+/-) Control.

Furthermore, in relation to the verb classes, the SET1/SET2 opposition is not really productive as a simple index

of intentionality. That is, the SET1 form is obligatory with Control verbs unless some evidential operator or interpretation is invoked. In these cases, it is the evidential operator that conditions the use of a SET2 form, not the productive application of an inflectional opposition whose meaning is that of "intention/control" vs. "non-intention/non-control." This suggests the following:

1. Control verbs describe the kinds of actions which entail as part of their default interpretation that an actor was aware and initiated some force or motion. SET1 indicates that the action or force initiated was in accordance with a mental plan or some state of awareness. SET2 occurs only in those cases where an evidential operator overrides the default interpretation. The SET2 form with Control verbs does not affect the default interpretation that some force or motion was initiated.

2. Fluid verbs describe the kinds of actions/events which do not require, but potentially include, some form of awareness and self-initiating force or movement. Unlike Control verbs, Fluid verbs do not have the default interpretation that some force or motion was initiated by the actor. Consequently, evidential operators are not necessary for the occurrence of SET2 forms. SET1 inflection indicates an action initiated in accordance with a mental plan. SET2 inflection is interpreted as indicating that there was no mental plan, and no initiation of force.

3. Non-Control verbs describe events which do not allow self-initiated force (and by implication no mental plan of the action); consequently, SET1 inflection is impossible.

As it turns out, the SET1/SET2 inflectional opposition is not the only grammatical environment which recognises a notional category of intention. Thus, it is important to identify these other environments and their co-occurrence requirements. This is the goal of the next three sections.

ya(t)- 'do' and ju(l)- 'become' as Verbal Pro-forms

The previous section established the existence of three verb classes based on the distribution of SET1 and SET2 forms. Furthermore, the distributional properties suggested that the opposition between Control and Non-Control verbs was based on the default (lexically based) interpretation of whether or not the verb described the type of action which could be self-initiated in accordance with a mental plan or state of awareness. Since Fluid verbs have no default value one way or another, the interpretation of intention was a function of SET1/SET2 opposition.

Further evidence for this analysis comes from the use of two verbs used as verbal pro-forms. When used as verbal pro-forms, the two verbs ya(t)- 'do' and ju(l)- 'become' distinguish between antecedents as "doing" (Control verb) and antecedents as "happening" (Non-Control verb). Fluid verbs allow alternative interpretations depending on the use of SET1 or SET2 inflection.

The first set of examples illustrate the non-anaphoric uses of the two verbs.

- (33)       ji     birami     jul-O  
           1/ABS ill       become-PERF/SET2  
           "I became ill."

- (34)       ji:    jya           yan-a  
           1/ERG work       do-PST/SET1  
           "I worked."

In many cases, the opposition between ya(t)- 'do' and ju(l)- 'become' distinguishes between self-initiated actions and non-initiated events (Shakya 1990). For example:

- (35)       ji:    khi           yan-a  
           1/ERG shit       do-PST/SET1  
           "I messed up."
- (36)       wo     khi   jul-O  
           3/ABS shit become-PERF/SET2  
           "It got messed up."

The two verbs also function as verbal pro-forms. In example (37), the verb ju(l)- 'become' functions as a pro-form for a non-Control predication. The pro-form ya(t)- 'do' is unacceptable here.

- (37)       jimi   pasa-ya           but-O  
           1/GEN friend-GEN<sup>4</sup>       lose-PERF/SET2  
           "My friend lost."
- ji     nō     Othe he   jul-O  
           1/ABS also like EMPH become-PERF/SET2  
           "And it happened to me too."

In contrast, in example (38) the verb ya(t)- 'do' functions as a pro-form for action predications. The pro-form construction with ju(l)- 'become' is ungrammatical here.

- (38)       laxmī:    mOca-yatO hyOe-kOl-O  
           Laxmi/ERG child-DAT content-CAUS-PERF/SET2  
           "Laxmi consoled the child."
- ji:    nō     Othe he   yan-a  
           1/ERG also like EMPH do-PST/SET1  
           "And I did likewise."

In short, the use of the pro-forms provides a diagnostic for distinguishing between Control (doings) and Non-Control (happenings) predications independent of the inflectional opposition.

Although the verb ya(t)- is a transitive verb assigning Ergative case to its subject, it may serve as a pro-form for an intransitive verb, if the verb is a Control verb. In other words, for ya(t)- 'do' to function as a pro-form, the transitivity or case assigning properties of the antecedent verb are irrelevant, but it must be a Control verb. Notice that the use of pro-form is independent of inflection, indicating that the functionally relevant properties of the antecedent action are related to the semantics of Control rather than the form of the verb.

- (39)        syam        turuntO dyŏ        won-O  
              Syam/ABS at once lie/PURP    go-PERF/SET2  
              "Syam went at once to lie down/sleep."  
  
              jimi pasă:        nŏ    Othe he    yat-O  
              1/GEN friend/ERG also like EMPH do-PERF/SET2  
              "And my friend did likewise."

If the verb is a Non-Control verb, then ya(t)- 'do' is not possible and ju(l)- 'become' is required.

- (40)        ji        gya-kko nhyO:l-ŏ    cal-O  
              1/ABS fear-ADV sleep-ABL feel-PERF/SET2  
              "I awoke from sleep frightened."  
  
              wo-ya nŏ    Othe he    jul-O  
              3-GEN also like EMPH become-PERF/SET2  
              "And it happened to him too."

- \* wŏ:    nŏ    Othe he    yat-O  
        3/ERG also like EMPH do-PERF/SET2

Conversely, although the verb ju(l)- 'become' is an intransitive verb assigning Absolutive case to its subject, it may serve as a pro-form for a transitive, Ergative case assigning verb, if the verb is a Non-Control verb. In other words, for ju(l)- 'become' to function as a pro-form, the transitivity

or case assigning properties of the antecedent verb are irrelevant, but it must be a Non-Control verb.

- (41)       ji:    wo-ya-gu   khwa lwomOn~O  
               1/ERG 3-GEN-ATR face forget-PERF/SET2  
               "I forgot how s/he looks."  
  
               wo-ya nŌ     Othe he     jul-O  
               3-GEN also   like EMPH become-PERF/SET2  
               "And it happened to him/her too."  
  
       \* wŌ:    nŌ     Othe he     yat-O  
               3/ERG also   like EMPH do-PERF/SET2

Although word order may reflect topicality and information structure correlates to passivization, Newari has no syntactic processes corresponding to passivization. However, the opposition between the two pro-forms is conditioned by the semantic role of the subject.

- (42)       laxmī:   mŌca-yatO bwo   bil-O  
               Laxmi/ERG child-DAT scold give-PERF/SET2  
               "Laxmi scolded the child."  
  
               ji:    nŌ     Othe he     yan-a  
               1/ERG also   like EMPH do-PST/SET1  
               "And I did likewise."  
  
       (43)       laxmī:   mŌca-yatO bwo   bil-O  
               Laxmi/ERG child-DAT scold give-PERF/SET2  
               "Laxmi scolded the child."  
  
               ji-to nŌ     Othe he     jul-O  
               1-DAT also   like EMPH become-PERF/SET2  
               "And it happened to me too."

Finally, with Fluid verbs, the use of the pro-forms distinguishes between intentional and non-intentional interpretations; ya(t)- 'do' goes with the intentional interpretation. Recall that napO=la(t)- 'meet' is a Fluid verb.

- (44)       ji:    syam-yatO ni-kŌ       gŌlli-e       napO=lan-a  
               1/ERG Syam-DAT two-times alley-LOC<sup>5</sup> meet-PST/SET1  
               "I (intentionally) met him twice in the alley."



jimi pasā: nō Othe he yat-O  
 1/GEN friend/ERG also like EMPH do-PERF/SET2  
 "And my friend did likewise."

The verb ju(1)- 'become' goes with the non-intentional interpretation. The two pro-forms are not interchangeable with these interpretations.

(45) jī: syam-yatO ni-kO gOlli-e napO=lat-O  
 1/ERG Syam-DAT two-times alley-LOC meet-PERF/SET2  
 "I ran into him twice in the alley."

jimi pasa-ya nō Othe he jul-O  
 1/GEN friend-GEN also like EMPH become-PERF/SET2  
 "And it happened to my friend too."

In short, the opposition between the two pro-forms ya- 'do' and ju- 'become', parallels the opposition between Control and Non-Control verbs. The use of the two proforms corroborates the distributional evidence from SET1/SET2 inflection. Verbs can be lexically classed relative to the presence, absence, or optionality of self-initiated force in the lexical representation; that is, they are typed according to whether they are construed as "doings" or "happenings." The pro-forms also corroborate the function of the SET1/SET2 opposition with Fluid verbs; that is, they distinguish self-initiated actions from non-initiated events.

### Intentional Action and "Premeditation"

One common folk-construal of intention, especially in Western legal systems, involves what we may call "premeditation." The periphrastic expression of "premeditation" in Newari expresses this relationship between a mental state and an action as a relationship between a quotation complement and a main clause. In this section, we examine this periphrastic

construction, which is used to represent "premeditation" and other propositional attitudes. The evidence will show that "premeditation" has many of the same semantic properties as "intention," but must be distinguished from the construal of "intention" which is functional in the SET1/SET2 opposition.

Outside of the SET1/SET2 inflectional contrast, expressions of intent or purpose in Newari can be periphrastic. In one type of periphrastic construction, the plan is represented as a quote complement with Non-Past SET1 inflection. The main clause represents the action.

Example (46) below is a simple clause with a Control verb. Example (47) is a direct quote complement. The complement clause is inflected with the Non-Past SET1 form. dhOkā: is a causative form of the verb dha(l)- 'say, speak' functioning as a complementizer.

(46)       ji:        la     nO-e  
          1/ERG     meat eat-NPST/SET1  
          "I'll eat meat."

(47)       ji:     la     nO-e                   dhOkā: dhOy-a  
          1/ERG meat eat-NPST/SET1 COMP     say-PST/SET1  
          "I said that I'll eat meat."

The same complementation structure is used with cognition verbs like bicar ya(t)- 'think' (literally 'thought + do').

(48)       ji:     la     nO-e                   dhOkā:  
          1/ERG meat eat-NPST/SET1 COMP  
  
          bicar       yan-a  
          thought     do-PST/SET1  
  
          "I thought that I'd eat meat."

The periphrastic expression of action with "premeditation" is represented in the same complement construction, but without a main verb of speaking or cognition.

- (49)       jĩ:    la    nO-e                   dhOka:  nOy-a  
           1/ERG meat eat-NPST/SET1 COMP    eat-PST/SET1  
           "(saying>intending) to eat meat, I ate."
- (50)       wõ:    la    nO-e                   dhOka:  nOl-O  
           3/ERG meat eat-NPST/SET1 COMP    eat-PERF/SET2  
           "(saying/intending) to eat meat, he ate."
- (51)       jĩ:    ya-e                   dhOka:  yan-a  
           1/ERG do-NPST/SET1 COMP    do-PST/SET1  
           "(saying/intending) to do it, I did."
- (52)       wõ:    ya-e                   dhOka:  yat-O  
           3/ERG do-NPST/SET1 COMP    do-PERF/SET2  
           "(saying/intending) to do it, s/he did."

A number of properties of the construction are worth noting.

First, the "premeditation" or "internal speech" is represented as the complement of dhOka:. The complement verb occurs in the SET1 Non-Past form. As in reported speech, SET1 inflection in the complement clause indicates logophoric reference; that is, the subjects in the complement and main clauses must be coreferential. Thus, literally, the complement form is quoted speech about a future action followed by the action.

Second, the action is represented in the main clause. The main clause verb inflects for SET1 or SET2 depending on the person/speech act properties, i.e., Epistemic Source.

Third, the expression of intention is indirect. There is no utterance or cognition verb in the construction; the complementation structure is indicated by the complementizer dhOka:. Thus, in the periphrastic expression, intention is a pragmatic inference derived via the semantics of the complement clause and the main clause action.

There is clear evidence for the pragmatic inferential processes which lead to the interpretation of intention. The

evidence comes from the fact that different inferences arise in minimally contrastive constructions.

For example, in (53) below, the two clauses do not have co-referential subjects. The subject of the complement clause is an unspecified third person; the subject of the main clause is first person. As result, the complement clause takes SET2 inflection, the main (action) clause has SET1 inflection. The inferred mental state is "fear of getting beaten" which is the motivation for fleeing.

- (53)       ji-to da-i                   dhOka: bisyū won-a  
           1-DAT hit-NPST/SET2 COMP flee go-PST/SET1  
           "(thinking) I would be beaten, I fled."

In example (54) below, the subjects in the two clauses are not coreferential; hence, the complement verb takes SET2 inflection. Since the subject of the main clause is third person, the main verb takes SET2 inflection. With non-coreferential subjects, there is a strong tendency to include the subject pronoun in the main clause, although it is not required in any syntactic sense.

- (54)       ji: da-i                   dhOka:  
           1/ERG hit-NPST/SET2 COMP  
  
           (wo) bisyū won-O  
           (3/ABS) flee go-PERF/SET2  
  
           "(thinking) I would hit him<sub>i</sub>, he<sub>i</sub> fled."

When the complement and main clause subjects are coreferential but the actions are not the same, the inference leads to the interpretation as a purpose clause.

- (55)       wo-yatO bi-e                   dhOka: won-a  
           3-DAT give-NPST/SET1 COMP go-PST/SET1  
           "I went thinking to give (it) to him."

- (56)       ji-to       bi-e                   dhOka: wol-O  
           1-DAT       give-NPST/SET1 COMP       come-PERF/SET2  
           "(thinking) to give (it) to me, he came."

Consider now the case of Fluid verbs. They allow both SET1 and SET2 forms without the need for evidential operators. The question is: how do they behave in periphrastic constructions? First, recall the Fluid pair below.

- (57)       ji:       wo-yatO   thwan-a  
           1/ERG 3-DAT   kick-PST/SET1  
           "I kicked him/her (intentionally)."
- (58)       ji:       wo-yatO   thwat-O  
           1/ERG 3-DAT   kick-PERF/SET2  
           "I kicked him/her (unintentionally)."

When the complement structure indicates "premeditation," the SET2 form in the main clause is unacceptable.

- (59)       ji:       wo-yatO   thwa-e                   dhOka:  
           1/ERG 3-DAT   kick-NPST/SET1       COMP  
  
           thwan-a  
           kick-PST/SET1  
  
           "(thinking) I'll kick him/her, I kicked him/her."
- (60)\*       ji:       wo-yatO   thwa-e                   dhOka:  
           1/ERG 3-DAT   kick-NPST/SET1 COMP  
  
           thwat-O  
           kick-PERF/SET2

However, if the complement structure does not indicate "premeditation," the SET2 form is acceptable in the main clause, whereas the SET1 form is not.<sup>6</sup>

- (61)       ji:       wo-yatO   thwa-i                   nhi dhOka:  
           1/ERG 3-DAT   kick-NPST/SET2 EMPH COMP  
  
           thwat-O  
           kick-PERF/SET2  
           "(thinking/fearing) I might bump him/her, I did."

(62)\*       ji:   wo-yatO   thwa-i           nhi   dhOka:  
              1/ERG 3-DAT   kick-NPST/SET2 EMPH COMP  
  
              thwan-a  
              kick-PST/SET1

In short, the appropriate selection of the SET1 or SET2 form in the main clause is triggered by the presence or absence of "premeditation" expressed in the complement clause.

In conclusion, the periphrastic expression of "premeditation" suggests the following configuration of semantic and grammatical components.

1. There is an action plan distinguished from the action itself. The action plan is the complement of the complementizer dhOka:. The predicate/complement structure of "premeditation" is isomorphic with the predicate/complement structure of a verb of speaking. In this case, it is "speaking to oneself," which can be interpreted as a form of mental awareness or planning. This can be schematized as follows:

[ [ [action plan] COMP] [action] ]

2. The verb in the complement clause is marked with an irrealis, non-past modality. That is, the plan is by definition potential with respect to the initiated force which characterizes the action itself. It is temporally prior to, and hence, logically independent of the action itself. The temporal component in the complement clause can be added to schema as follows:

[ [ [NP [VP-NPST] ] COMP] [NP [VP] ] ]

3. The subject of the complement and main verbs are coreferential. The complement verb is marked with the logophoric SET1 form. In short, one can only "intend" with

respect to one's own behavior. The co-indexing requirements can be added as follows:

[ [ [NP<sub>i</sub> [VP-NPAST/SET1] ] COMP] [NP<sub>i</sub> [VP] ] ]

4. The predicate phrase (VP) of the main clause must be equivalent to the predicate phrase (VP) in the complement clause. The action plan and the action itself must be identical with respect to all referential variables. In other words, to count as intentional, the actual action performed must have followed the represented plan of action; that is, it must have followed directly from the "premeditation."

The complete schematic representation of the periphrastic construction is represented as follows:

- (63)        jī:    la    nO-e                    dhOkā: nOy-a  
              1/ERG meat eat-NPST/SET1 COMP    eat-PST/SET1  
              "I intentionally ate meat."  
              "(saying/intending) to eat meat, I ate."

[ [ [NP<sub>i</sub> [VP<sub>j</sub>-NPAST/SET1] ] COMP] [NP<sub>i</sub> [VP<sub>j</sub>] ] ]

It is important to add that the claim is not that the periphrastic notion of premeditation and intentional action are identical. The crucial test here is negation. The periphrastic construction can be constructed literally and negated:

- (64)        jī:    la    nO-e                    dhOkā: (dhOy-a:)  
              1/ERG meat eat-NPST/SET1 COMP    (say-NF)  
              tOrO   mO-nOy-a  
              but    eat-PST/SET1  
              "I said I would eat meat,  
              but didn't."

In other words, the periphrastic expression of "premeditation" allows for a temporal hiatus between the representation of a plan and the initiation of action; thus, negation is possible. As we shall see in the next chapter, the concept of

intentional action we are concerned with involves not premeditation, but "intention-in-action"; that is, the mental plan and the self-initiated force are co-temporal in the event.

Nevertheless, the periphrastic construction provides some insight into the conceptual structure of "premeditation," and potentially "intention." These insights will be relevant in Chapter IV, where we develop in detail the idea that intentional action consists of both a mental plan and the initiation of force.

#### Intentional Action and "Awareness"

This section looks at the representation of intentional action in adverbial constructions using an adverbial derivation of the verb ca(1)- 'feel, sense, be aware of.' The co-occurrence requirements of the SET1/SET2 inflectional forms with the adverbial form will demonstrate that the concept of "awareness" or "mental plan" is one component of the concept of intentional action.

The verb ca(1)- can be used with a variety of nominal forms to create sensation and feeling predicates.

- (65)       ji-gu lha:       pu       cal-O  
          1-GEN hand       cold feel-PERF/SET2  
          "My hand feels cold."
- (66)       ji-tO       sekhō       cal-O  
          1-DAT       cold/flu feel-PERF/SET2  
          "I've a cold/flu."

With nominalized complements, it indicates 'awareness of' or 'realization of' the proposition expressed in the complement.

- (67)       ji       bhukhae bwo:-gu       cal-O  
          1/ABS earth-quake/SET2-COMP feel-PERF/SET2  
          "I realized/felt the earthquake."



- (68)           ji-mi pasa   lihā: mO-wo:-gu                   cal-O  
               1-GEN friend return NEG-come/SET2-COMP feel-SET2  
               "(I) realized my friend had not returned."

With the adverbial derivational suffix -kO, the form caekO is used to indicate actions done "consciously." The emphatic form, with reduplication and nasalization, strongly implicates that the action was done 'consciously', hence 'deliberately' or 'intentionally.' Recall that the verb caphu(t)- 'snap, break' is a Control verb. Evidentials such as thē 'like, seem' often occur when attributing mental states to the third person on the basis of appearance. Thus:

- (69)           wō:   caekO-caekŌ   ka           caphut-O           thē  
               3/ERG consciously   thread snap-PERF/SET2 like  
               "It looks like s/he consciously snapped  
               the thread."

The negated form yields an adverbial construction meaning "unconsciously" or "unintentionally."

- (70)           wō:   mO-caekO           ka           caphut-O           thē  
               3/ERG un-consciously thread snap-PERF/SET2 like  
               "It looks like s/he unconsciously snapped  
               the thread."

Given the adverbial form mO-caekO 'unconsciously', we can now use it as a diagnostic to see whether it is a semantically relevant operator with respect to the use of SET1 and SET2 forms. In other words, we can see whether it functions like the evidential operators to trigger SET2 inflection.

With first persons, speakers clearly prefer SET2 forms with mO-caekO 'unconsciously.' The emphatic particles nhi and ka bring out the relevant emphatic foci in each sentence. Although I will not attempt to gloss the particles, in these two contexts, nhi seems to give more positive emphasis for an event

in accordance with expectation whereas ka brings out a more negative sense of counter expectation.

- (71)       ji:   caekO-caekO   ka       caphun-a       nhi  
              l/ERG consciously thread snap-PST/SET1 EMPH  
              "I deliberately snapped the thread."
- (72)       ji:   mO-caekO       ka       caphut-O       ka  
              l/ERG un-consciously thread snap-PERF/SET2 EMPH  
              "I unconsciously snapped the rope."
- (73)??     ji:   mO-caekO       ka       caphun-a  
              l/ERG un-consciously thread snap-PST/SET1  
              "I carelessly broke the thread."

One speaker who marginally admitted SET1 inflection in (73) above seemed to interpret the construction to mean that the action is performed with a degree of awareness but without "attentiveness," assuming the action of snapping the thread was planned and initiated, but performed "in a careless, or inattentive manner." Although not all speakers shared this intuition, the variation itself is revealing. The distinction seems to hinge on exactly what aspects of "consciousness" or "awareness" are thought to be indicated by the lexical item, a thorny issue to say the least.<sup>7</sup>

In any case, speakers draw a clear analogy between examples with mO-caekO and the examples below with khOnisa 'it.appears.' That is, khOnisa functions as an evidential operator of inferred result, taking the entire clause in its scope; mO-caekO functions as an adverbial modifier whose scope is the predicate phrase. Both suggest that an action was performed without the appropriate form of awareness or mental planning.

- (74)       ji:   ka       caphut-O       khOnisa  
              l/ERG thread snap-PERF/SET2 it.appears  
              "It appears I snapped the rope."

- (75)       ji:   mO-caekO       ka       caphut-O       ka  
           1/ERG un-consciously thread snap-PERF/SET2 EMPH  
           "I unconsciously snapped the rope."

There is a clear distinction between direct causation examples with mO-caekO and indirect causation examples as in (76) below. In example (76), the verb la(t)- 'happen, occur' suggests more strongly that the actor was only the indirect cause and lacked control. That is, the speaker may have accidentally lost his or her balance or pulled too hard.

- (76)       ji:   mO-caekO       ka       caphu-e  
           1/ERG un-consciously thread snap-INF  
  
           lat-O  
           happen-PERF/SET2

"I unconsciously happen to snap the thread."

In fact, in this construction, no evidential operators are necessary at all. The verb la(t)- 'happen, occur' suggests that the actor does not bear the ultimate causal responsibility. In other words, it obviates the causal dynamic in general, rather than directly obviating the evidential meanings related to a mental plan or mental state.

- (77)       ji:   ka       caphu-e   lat-O  
           1/ERG thread snap-INF happen-PERF/SET2  
           "I happen to snap the thread."

Finally, a complete lack of responsibility for any causal dynamic can be expressed by using the intransitive non-causative form of the verb, cabu- 'snap, break' (intransitive).<sup>8</sup>

- (78)       ka       cabut-O  
           thread snap-PERF/SET2  
           "The thread broke."

In the case of Fluid verbs, none of the speakers accepted the SET1 forms co-occurring with mO-caekO. Recall that thi- 'touch' is a Fluid verb.

- (79)\*      ji:    mOtO            mO-caekO            thiy-a  
              1/ERG lamp        un-consciously      touch-PST/SET1
- (80)        ji:    mOtO            mO-caekO            thil-O  
              1/ERG lamp        un-consciously      touch-PERF/SET2  
              "I unconsciously touched the lamp."

Based on the distribution of SET1/SET2 forms, the facts are as follows:

1. SET1 forms occur with Control verbs. SET2 forms do not occur with Control verbs except with evidential operators.

2. With Control verbs, the co-occurrence of mO-caekO 'unconsciously' and SET1 forms is, for the most part, unacceptable. The co-occurrence of SET2 forms with mO-caekO is acceptable for all speakers.

3. The occurrence of mO-caekO, which indicates the negation of "consciousness," is inconsistent with the interpretation that the action involved a particular type of mental state or plan, indicated by SET1 forms.

4. To the extent that SET2 forms may occur with Control verbs when mO-caekO is included in the clause, the function of mO-caekO meaning "unconsciousness" is like the evidential operators, hŏ for reported speech and khOnisa for inferred result. In other words, whatever semantic content is attributed to the lexical item mO-caekO 'unconscious', it is a functionally relevant variable that conditions SET2 usage with Control in first person declarative clauses. In short, the conceptual account of "intention" must account for some notion of "consciousness" or "awareness." In the Chapter IV, this is identified as the representational component of intentional action.

5). The semantic domain of mO-caekO 'unconsciously' and other evidential operators is distinct from the semantic domain of indirect causation with the verb la(t)- 'occur, happen', and non-causative intransitive usages. In other words, there are two ways in which the action may be described as "non-intentional." First, it may have been the result of an action initiated and performed, but without the appropriate plan, mental representation, or awareness. In this case, evidential operators will occur. Second, it may have been an action in which the antecedent cause is not located with any causal force initiated by the actor. In this case, the verb la(t)- 'occur, happen' is more likely to be used. Conversely, for SET1 inflectional use, an intentional action is one which requires that the actor be both the direct causal antecedent for the initiation of force, and the force must be directed in accordance with the appropriate mental state or plan.

#### Summary

This chapter examined the distribution of SET1/SET2 forms relative to a diagnostic set of semantic variables:

1. Three categories of verbs, Control, Non-Control, and Fluid.
2. The evidential operator khOnisa 'it.appears'.
3. The two verbs ya- 'do' and ju- 'become' functioning as proforms.
4. The periphrastic expression of "premeditation."
5. The adverbial modifier mO-caekO 'unconsciously.'

What has emerged is an implicit concept of intentional action and a variety of lexical and morphosyntactic reflexes. This implicit concept of intentional action appears to consist of two domains: the action involves a self-initiated force and the action is in accordance with the appropriate mental state or plan.

Finally, in distinguishing between verb classes, it became clear that the concept of self-initiated force was part of the inherent lexical meaning of Control verbs, but was only potential with respect to Fluid verbs. It was not possible for Non-Control verbs to receive an interpretation involving self-initiated force. In short, the domain of self-initiated force appears to be part of lexical meaning.

In contrast, the notion that an intentional action involves some sort of plan or mental state does not seem to be part of lexical meaning. That is, Control verbs take SET1 forms in simple clauses, but when the appropriate evidential operators are present, they take SET2. In these cases, SET2 forms indicate that an action was performed (i.e., a self-initiated force was present), but not in accordance with an appropriate mental state. In other words, the notions of plan, mental representation, or mental state do not seem to be part of inherent lexical meaning. It is the goal of Chapter IV to provide a more explicit account of how the two domains of conceptual structure relate to the lexical and inflectional realizations.

### Notes

<sup>1</sup>In some cases, speakers will accept SET2 forms without lexically/phonologically present evidential operators. However, the interpretations are evidential in nature. In other words, speakers will add that the utterance would only be appropriate under the conditions specified by the evidential operators. The important point here is that the same is not true of Fluid verbs, which do not need evidential operators with SET2 inflection.

<sup>2</sup>See Dowty (1979) and Lakoff (1970) for observations on the intentional interpretations with future-statives like 'I'm going to be a doctor' in English as compared to 'I'm going to be sick'. The nominal form gOjOb is from Nepali.

<sup>3</sup>The verb lwomOn- 'forget' is an irregular negative of lumOn- 'remember'.

<sup>4</sup>Under certain semantic and pragmatic conditions, the Genitive suffix -ya may occur with subjects/topics. The usages appears to be conditioned by both lexical semantic and discourse pragmatic functions. It seems to occur mostly with experiencer and other stative predicates. It also appears to be conditioned by certain topicality parameters. It is a curious part of the grammar that warrants further research.

<sup>5</sup>The Locative form /gOlli-e/ 'in the alley' becomes [gOlli:] by a regular morpho-phonological rule /i-e/ -> [i:].

<sup>6</sup>I thank Mr. Daya Ratna Shakya for pointing out to me that adding the Emphatic suffix -nhi draws out the non-intentional reading. Note also that Manandhar (1986:129) glosses one of the senses of -nhi as "beware."

<sup>7</sup>The examples with mO-caekO also admit interpretations of the following type with two participants. "Unknown to me, s/he..." or "Unknown to him, I...". They are contingent interpretations whose properties don't affect the main point: mO-caekO indicates lack of a mental plan or awareness. It is also appropriate here for me to give a special thanks to Manoj Kanskar, Sunil Nepali, and Daya Ratna Shakya for discussing this issue with me many times, providing me with their interpretations, and being patient with me and my questioning.

<sup>8</sup>The alternation ca=phu- 'snap, break' (transitive) and ca=bu- 'snap, break' (intransitive) is an historical relic of an earlier Proto Tibeto-Burman causative prefix \*s- (cf. Hale 1973; Hargreaves and Tamot 1984; Malla 1985). It is no longer productive in contemporary Kathmandu Newari.

## CHAPTER IV

### THE CONCEPTUAL STRUCTURE OF INTENTIONAL ACTION

The evidence from Chapter III showed that the concept of intentional action realized by the inflectional system is constituted, on the one hand, by a notion of "awareness" or "mental plan," and, on the other hand, by a notion of "self-initiated force" or "control." This chapter examines the conceptual structure of intentional action in more detail. The goal is to account for how the conceptual structure of intentional action is realized in the lexicon and SET1/SET2 inflectional opposition.

In the first section, we consider several important insights from philosophy, cognitive development, language acquisition, and linguistics. Insights from each area will support the claim that the concept of "intentional action" is best viewed as having two components: one involving the mental representation of an action (plan) and the other involving the self-initiation of force (i.e., causal) dynamics.<sup>1</sup> In the second section, we adopt this view of intention and apply it to the Newari data.

#### On Intentional Action

This section considers intentional action from three points of view: action theory in philosophy, cognitive development and language acquisition in psychology, and linguistic



semantics. The research in each of the three fields leads to one conclusion: intentional action is best viewed as consisting of a representational component and a force dynamic. Together, the two components can be said to form the proximate causal antecedent to intentional action (Brand 1984).

### Philosophical Psychology

Intention is an enigmatic concept by virtue of its relative inaccessibility to observation and introspection. As William James notes in his classic Principles of Psychology:

We know what it is to get out of bed on a freezing morning in a room without a fire, and how the very vital principle within us protests against the ordeal. Probably most persons have lain on certain mornings for an hour at a time unable to brace themselves to the resolve. We think how late we shall be, how the duties of the day will suffer; we say, "I must get up, this is ignominious," etc.; but still the warm couch feels too delicious, the cold outside too cruel, and the resolution faints away and postpones itself again and again just as it seemed on the verge of bursting the resistance and passing over into the decisive act. Now how do we ever get up under such circumstances? If I may generalize from my own experience, we more often than not get up without any struggle or decision at all. We suddenly find that we have got up. (1890/1950:524).

Within philosophical theories of action, of which intentional action is a part, there is a long tradition of wrestling with the problem of intention (cf. Brand 1970 for a review). One central issue in action theory is to distinguish between "action" (e.g., I am shaking my leg) and "mere behavior" (e.g., My leg is shaking). Drawing the distinction requires reference to some unique type of mental event which is present in the case of an action and absent in the case of mere behavior (cf. Davidson 1980; Searle 1983). Distinguishing among

philosophical theories of action is not our concern here; instead, we are interested in the notion that there is a unique mental state: "intention."

As with other propositional attitude predicates, such as "belief," it is generally argued that "intention" is a two place predicate, one argument of which is the "subject," the other of which is the "proposition" or intended action. As semantic entities, propositional attitude predications, such as "believe," "want," and "intend," allow us to individuate and refer to culturally recognisable aspects of our mental life.

The question whether, in fact, the semantic structure of a folk (philosophical or psychological) model can account for the actual cognitive organization of "intentional action" is problematic. Thus, it is important to keep in mind that we are interested in the model of "intention" which is functional in the Newari linguistic system. We are not directly interested in intention as a construct in philosophy or cognitive science. However, since we are not talking about purely imaginary notions, such as unicorns, we may assume the objective existence of some unique mental event(s) or process(s) that accompany self-initiated behavior. The experience and understanding of this mental event is part of a shared cultural experience. We are interested in how the grammar of Newari construes it.

One problem with viewing intention as a mere propositional attitude is that it doesn't really account for how an "attitude" can, in fact, initiate an action. As James concedes, we can desire, imagine, cajol, and premeditate all we want and never get out of bed. Similarly, the propositional attitude account

lacks a causal explanation for the relationship between the mental event and the initiation of a movement, that is, the execution of an action.

In short, the fundamental issue in a theory of intentional action is the problem of causation (Brand 1979; 1980; 1984). Borrowing the key insights from Brand, we will distinguish two components which together make up what he has termed the "proximate cause" of action. Generalizing somewhat from his original formulation, the two components can be termed: representational and force dynamic.

#### The Plan-in-Action

The first component is termed the "cognitive" component by Brand (1984). I will use the term "representational." It was already suggested in Chapter III that intentional action involves some kind of mental representation, a goal or plan which consciously or unconsciously guides the behavior.<sup>2</sup> This mental representation is understood, not as a truth functional proposition, but rather as a plan of action, a "practition" in the sense of Castañeda (1975) or, as Brand (1984) suggests, as a "script" in the sense of Schank & Abelson (1977). Note how similar these notions are to the semantic structure of Newari "premeditation" complements.

The plan serves to guide the on-going performance of the action and is said to be the object of "immediate intending" (Brand 1979; 1984), or "intention-in-action" (Searle 1983). Note also that in contrast to the concept of "premeditation," the plan is realized in action as a self-initiated behavior

which is structured in accordance with a mental representation. In other words, we are interested here in the concept of "intention-in-action" not "intending-to-act." There are two other important properties of the representation worth noting.

First, viewing intention as a mental "plan-in-action" captures the intuition that to count as an intentional act, the action must be carried out by following the specific plan which was represented. For example, someone may intentionally be pulling on a string, without intending to break it. If the string does break, then we would say that the person didn't intentionally break the string; although, we say they intentionally pulled on the string. In the case of the utterance I broke the string, the utterance describes a self-initiated behavior which was not in accordance with the plan the actor had, which was: pull on the string. It is in these situations that we resort to expressions such as: "I didn't intend to do it."<sup>3</sup>

In short, to assert that some instance of behavior was an intentional action is to assert that:

1. The behavior was self-initiated.
2. The behavior was in accordance with some mental plan.
3. The characterization of the action in the asserted proposition is the same as what the actor had in mind as part of the mental representation of action.

To elaborate on the example from Chapter I: "Oedipus intentionally killed a stranger at the cross-roads," is true because the utterance correctly characterizes both the event and the mental representation that guided Oedipus' behavior.

However, it is false to say that "Oedipus intentionally killed his father" because although the utterance does correctly characterize the event itself, it does not correctly characterize the mental representation that guided Oedipus' actions (Freud notwithstanding).

As we saw in Chapter III, with Control verbs, the evidential operators, khOnisa 'it.appears', mO-caekO 'unconsciously', and hO 'hearsay evidential' all function as lexical resources for obviating this representational component in first person clauses, without denying the force dynamics, which are entailed by the nature of the actions described by Control verbs.

The mental representation or plan-in-action is necessarily self-referential (Castañeda 1975). As our everyday intuitions suggest, we can only have intentions about our own actions. Consequently, there is an irreducible asymmetry between first and non-first person statements of intentionality. As was suggested in Chapter II, it is this property of self-reference that underlies the first/non-first person asymmetries, evidential constraints, and logophoric properties of SET1/SET2 inflection in Newari.

### The Initiative-in-Action

The second component is termed by Brand the "conative" or motivational component. It is an "impulse" or "impetus" that constitutes the initiation of a behavior.<sup>4</sup> As such, it captures the intuition that intention involves self-initiated force, with no antecedent causal forces outside the self. Thus,

"initiative-in-action" is one component of our everyday notion of "animacy," or in Premack's (1990) view, "the [child's] theory of self-propelled objects." The "initiative-in-action" and the "plan-in-action" together make up our concept of intentional action.

There are some wrinkles in this concept of intentional action as a force dynamic. As Talmy (1976; 1988) notes, the expression "I dragged myself out of bed" is evidence for a folk-psychological notion of self-agency in which the self and the body are split and treated metaphorically in the everyday language of force and causation. Examples of this type are structurally identical to sentences such as "He dragged me out of bed," or "I dragged him out of bed." Thus, intentional action is expressed metaphorically in these constructions as "mental self-as-agent" acting on "physical self-as-patient."<sup>5</sup>

Ricoeur (1966) argues for two alternative views of intentional force. On the one hand, he acknowledges the "objective" view of intention as force and causation: the body appears to be moved by an "act of will" (Talmy's "self-agency"), just like any other object can be moved by exerting force on it.

On the other hand, Ricoeur points out that we do not usually experience ourselves and our actions as objects of willing. As James also noted, we rarely (or never) actually experience ourselves as being dragged (or pushed) around by a will. We simply act "in-the-world" on the basis of plans and goals, which presumably guide our behavior. In other words, the phenomenology of intentional action works against reducing statements about intentional action to statements about our body

as "patient" and our will as "agent." From a linguistic semantic perspective, the concept of "will as agent" has theoretical value only to the extent that some languages express the concept in reflexive or middle voice constructions via expressions such as: "I finally forced myself to get some sleep." There is no evidence in the Newari SET1/SET2 inflectional system that intentional action is construed as "will=agent and body=patient." However, Chapter VI will show that some middle voice causatives do view intentionality somewhat in the manner that Talmy suggests.

Hence, Ricoeur's view has the advantage of including both Talmy's force dynamics and a phenomenological, which we may call representational, component. This view allows for a more straightforward account of the asymmetries of Newari SET1/SET2 inflection.

#### The Child's Concept of Intention

Researchers in social-cognitive development and language acquisition have reached similar conclusions about the child's concept of intentional action.

The acquisition of a concept of intention has been an important issue in understanding social-cognitive development in children, particularly within the context of the child's developing abilities in communication, non-egocentric perspective taking, and moral reasoning (Flavell 1985; Gee & Savasir 1985; Premack 1990; Shantz 1983; Shatz 1983)). More recently, researchers have focused on how the emerging concepts of agency

and intention are realized in the developing linguistic system of the child (Budwig 1989; 1990).

Budwig (1990) points out that there is an important distinction between the concept of agency as it is used in linguistics to account for the prototypical mappings from a transitive action schema to grammatical structure and the concept of agency as it is used to account for the child's emerging sense of Self and Other in developmental psychology.

As noted in Chapter I, the agency prototype has often been viewed within the context of transitive clause structure, as a prototypical co-occurrence of properties, including animacy, volition, control, and object affectedness (Hopper and Thompson 1980; Lakoff 1977). In turn, intention (usually called volition) is treated uncritically as simply one contributing feature in the agent/transitivity prototype.

In contrast, according to Budwig, developmental psychologists have come to recognise that the child's initial concept of agency is somewhat different.

[The child's concept of agency is] related to the understanding that animate beings move and behave in a causally independent manner, while intentionality is taken to be a developmentally more advanced notion which includes a consideration of the internal states that guide behavior [my emphasis DH] (1990:133).

In a longitudinal study of the developing concept of agency in children, Wolf (1982) identifies three characteristic stages in the child's concept of the other as agent. In the first stage, the child views other "agents" instrumentally, as "agent/instruments" capable of being manipulated to fulfill the child's needs. In stage two, the child begins to realize that



the mental life of others is "like oneself," consisting of mental attributes which distinguish animate from inanimate beings. In the final stage, the child realizes that other humans initiate and perform intentional actions in a causally independent manner, irrespective of the child's own wishes. Wolfe emphasizes that the child's developing concept of independent agency in others emerges out of social interaction, as part of a larger stage in social-cognitive development: the growing differentiation of self from other. In other words, the child comes to realize that others have a unique and inaccessible mental life; apparent self-initiated action is one form of evidence for this mental life.

Poulin-Dubois & Shultz (1988) studied the developmental sequences in the concept of agency and intention. They concluded:

[To the child] Intention is an elaboration of agency. [To the child] Agency explains the fact that a being moves and behaves on its own. Intention elaborates on the explanation by postulating an internal mental state that guides and controls the action (1988:120).

Thus, developmentally, intention is not just one of several factors contributing to an undifferentiated agency or transitivity prototype; rather, it is a more complex notion in which the child comes to understand that intentional action in others is:

1. Causally independent of direct antecedents. In other words, it involves an apparent "initiative-in-action."
2. Based on a particular type of mental event, In other words, it involves a "plan-in-action."

3. Is not directly accessible in others and must be inferred.

Not surprisingly, children appear to first differentiate the concepts of agency and intention in linguistic forms when referring to their own actions. In particular, Budwig (1989) demonstrates that English speaking children go through a developmental sequence in which they use the alternate self-referential pronominal forms (I, my) in subject position to distinguish different perspectives on self-initiated and represented action. In particular, the possessive form my tended to be used for situations rated high on a transitivity prototype scale; the nominative form I was used in situations rated low on a transitivity scale.

More importantly, Budwig found that the transitivity parameters which best accounted for the data were, in fact, the intersection of two domains. In one domain, the tendency to use my involved a force dynamic and was reflected in canonical agent/patient utterances like: "my open that." In the second domain, the tendency to use my involved pragmatic control (wants & needs) statements, reflected in utterances such as: "my want the little ones." Thus, the children's linguistic category of "self-as agent" included both statements about plans or goals and statements about causal efficacy with objects. Finally, the children did not make the formal distinction when referring to actions by others. Thus, Budwig concludes that, "English-speaking children give special linguistic treatment to a subcategory of agency, namely, Self as agent" (Budwig 1990:135).

## Intention and Semantic Representations

In early generative theories, intention (or volition) was not the focus of much research. The seminal treatment of intentional action within the generative tradition follows from Gruber (1976) and Jackendoff's (1972) discussion of the Agent thematic role, defined by Jackendoff as follows:<sup>6</sup>

The Agent NP is identified by a semantic reading which attributes to the NP will or volition toward the action expressed in the sentence (32:1972).

The internal structure of intention is not considered. As a result, despite the substantive differences between the Gruber-Jackendoff approach and, for example, Fillmore's Case Grammar (1968), the early generative approaches do not significantly differ in their treatment of intentional action.

Ross (1972) argued that numerous syntactic properties of English can be accounted for by positing an underlying semantic operator of intentionality, which surfaces in English syntax as the auxiliary 'do.' However, the conceptual structure of intention is not an issue.

The issue of whether intentional vs. non-intentional interpretations for certain verbs are merely cases of indeterminacy or actual lexical ambiguity (or polysemy) is addressed in Lakoff (1970a) Catlin & Catlin (1972), and tangentially in Jackendoff (1972). It is this problem that Bendix (to appear) wishes to avoid in his discussion of the Newari system.

The problem of representing these ambiguities via a simple underlying 'DO' operator leads Dowty (1979) to suggest in a

footnote a distinction between "intentional/non-intentional" and "controllable/non-controllable," a nascent version of a distinction between a representational component and a force component.

However, Dowty's suggestion is not followed up in subsequent works on predicate decomposition in Role and Reference Grammar (Foley and Van Valin 1984; Van Valin 1990), where a semantically primitive 'DO' operator indicating "volitionality" (i.e., intentionality) is distinguished from other semantic primitives 'CAUSE' and 'BECOME.' No attempt is made to distinguish the representational and force components of intentional action.

Hill (1969) identifies morphological alternations in Cupeño that function to indicate degree of volitionality. Klaiman (1981) shows how volitionality is a semantic parameter in the determination of subject in Bengali. However, since neither language appears to exhibit person/discourse role asymmetries in the marking of volitionality, no explicit distinction is made between representational and force components of intention. This is also true for Klaiman's (1988) insightful cross-linguistic analysis of "control and affectedness." In other words, as long as the data does not require the force and representational domains to be distinguished, "volition/control/intentional action" are viewed as unitary concepts.

Two notable exceptions in the literature are Pleines (1976:48) and Talmy (1976:86), both of whom identify the need for a "scope of intent" in the underlying semantic representation of causation. The concept "scope of intent" captures

the intuition that with intentional behavior, the force dynamic is initiated in accordance with a plan; thus, the causal sequence which may be attributed to the agent is that which falls under the scope of the plan.

### Intentional Action in Lexical Representations

In contrast to his earlier studies, Jackendoff (1985) explicitly identifies the representational component of intention. He argues that the semantic properties common to the two readings of the verb 'persuade' as 'cause X to believe Y' or 'cause X to do Y' follow from the shared semantic properties of "believe" and "intend" (cf. Givón 1975; Lakoff 1970b). That is, in Jackendoff's account, "believe" and "intend" both involve a semantic operator "REP" (representation), which takes propositions (states, events, or actions) as arguments. Although the formal properties of the representation are not important here, the insight is relevant. For example:

- (1) John persuaded Bill that dogs can talk.  
[x CAUSE (y REPRESENT {dogs can talk})]
- (2) John persuaded Bill to talk to the dog.  
[x CAUSE (y REPRESENT {y talk to the dog})]

Example (1) above says that John caused Bill to represent a state of affairs and adopt a belief state toward it. Example (2) says that John caused Bill to represent a state of affairs, and initiate an action which realizes the state of affairs. Jackendoff also points out that in examples such as (2), the propositional object of REPRESENT must describe a behavior which is capable of being performed via the initiated force of an actor.

Jackendoff (1987) identifies the force dynamic by distinguishing a Thematic tier from an Action tier in semantic representations. In essence, the Thematic tier identifies the spatial and directional characteristics of an abstract event schema: Source>Goal. The Action tier identifies the characteristics of human involvement in the event schema: Volitionality and affectedness. The multi-leveled representations capture the insight that NPs can assume more than one thematic role in the conceptual structure underlying a sentence.

Jackendoff (1987; 1990) goes on to argue that lexical structures are best viewed as multi-leveled predicate/argument structures in which:

. . . thematic relations are to be reduced to structural configurations in conceptual structure; the names for them are just convenient mnemonics for particularly prominent configurations...the terms Theme, Agent, and so on, are not primitives of semantic theory. Rather, they are relational notions defined structurally over conceptual structure...(1987:378-79).

Jackendoff's approach follows from earlier work on the structure of lexical representations by Gruber (1965) and, in particular, Talmy (1975; 1976; 1985). The central principle in formulating lexical representations is that of "conflation" (Talmy 1985): components of conceptual structure are incorporated into, hence, entailed in lexical semantic representations. As part of lexical semantic structure, they come to play a functionally relevant role in the morphosyntactic properties of that verb.

This view of lexical structure isolates individual components in conceptual structure rather than appealing to tacit assumptions about thematic role properties. For example,

the three English motion verbs "dive," "tumble," and "fall" can be distinguished in terms of which semantic components are incorporated as part of the lexical representation. Each verb contains a motion component [MOVE] and minimally takes one argument, a thing that moves. A simple representation would capture this information as follows: [x MOVE]. Since it is not relevant for our concerns, the [MANNER] component which distinguishes the verbs can be ignored.

On the basis of this shared semantic property we typically say that they all have "Theme" semantic roles. However, we do not really need the term, except as a mnemonic, since the concept of "thing that moves" is already incorporated into the lexical representation as an argument of the [MOVE] predicate.

By conventional interpretations, "dive" entails that the mover initiate the motion; in this sense, it is analogous to a Control verb. In contrast, "tumble" does not require such an interpretation. It allows either an intentional or non-intentional interpretation. In this respect, it is analogous to a Fluid verb. Finally, "fall" does not plausibly take an interpretation in which the mover initiates the motion of falling; it is analogous to the Non-Control verbs.

The information that "dive" entails a self-initiated behavior is incorporated as part of the lexical representation; it is part of what we know once we have learned what "dive" means. Also, the information which says that the action involves self-initiated force has a different status in the lexical representation for "dive" than the same information as applied to "tumble," where it is only "optionally" interpreted.

Finally, the self-initiated force is not present at all in the representation of "fall," and is incompatible with its meaning.

This concept of lexical conflation accounts for the default values of Control, Non-Control, and Fluid verbs. In combination with a system of basic predicates, it provides a coherent model of how individual components are structured into a complex whole--a lexical representation. In the final section of this chapter, we will adopt this format and show how it quite naturally accomodates the distinction between the representational and force dynamics of intentional action.

#### Intentional Action in a Cognitive Grammar Event Model

For our purposes, the most revealing accounts of event structure are found in cognitive grammar (Croft 1991; Lakoff 1977; 1987, Langacker 1987;, Talmy 1975; 1976; 1988), and, in particular, DeLancey's (1981a; 1984a; 1984b; 1985a; 1985b; 1985c, 1986; 1990) work on a cognitive model of event structure for Lhasa Tibetan.

DeLancey's conceptual model of action and event structure draws on two important insights from Cognitive Grammar:

1. Linguistically relevant conceptual categories are grounded in experiential-perceptual categories and transferred to other domains via image-schematic transformations.
2. Conceptual categories are defined relative to idealized cognitive models (or prototypes), and graded extensions of the models.



In addition, DeLancey proposes that clausal morphosyntax can be described as a function of an attentional focus mechanism (Viewpoint) which includes or excludes sub-sections of an idealized event model (DeLancey 1981).

One especially important insight from DeLancey's model is his observation that describing an action as intentional attributes a particular, and unique, viewpoint to the intentional actor. DeLancey's model also draws an important distinction between "onset" (or Source) and "result" (or Goal) viewpoints. Intention is a component of the onset dynamics. In particular, an intentional action entails that the actor represents and initiates the action.<sup>7</sup>

Combining DeLancey's event schema with the two domains of intentional action outlined above yields an onset dynamic for a first person intentional action schematically represented as follows:

SENTENCE            "I stood up."

SCHEMATIC  
REPRESENTATION

	SOURCE----->GOAL
Temporal	Onset-----Process--->Result
Causal	Onset-----Process--->Result
	[REPRESENT [INITIATE [STAND UP]]]

The schema captures the intuition that an intentional action involves self-initiated force and a representation of that self-initiated force. The behavior described by the verb itself is represented and initiated. The temporal and causal dynamics of the event proceed from onset/source to result/goal. The event itself is a change of position from a source position (sit) to a goal position (stand).

In contrast, the first person perspective of a non-intentional event is necessarily limited to the action/event properties subsequent to the onset. In other words, the causal dynamics of "falling down" do not have any onset properties until it actually begins to be experienced by the first person; in this sense, it has no causal onset. Although there may be identifiable causal antecedents, they are expressed outside the core clause. In other words, Source>Goal relations may be broken down into causation chains, parts of which are included or excluded from the event representation and the clause.

SENTENCE            "I fell down."

SCHEMATIC  
REPRESENTATION

	(SOURCE----->GOAL
Temporal	Onset-->Result
Causal	Process>Result
	[ x FALL DOWN]

In DeLancey's view, event models are cognitive representations of event/action prototypes in which attention is directed through the spatial/temporal contour of the action/event. For example, the prototypical first person transitive event schema can be represented by a vector chain isomorphic with the attentional flow.<sup>8</sup>

SCHEMATIC  
REPRESENTATION

	SOURCE----->GOAL
Temporal	Onset-----Process----->Result
Causal	Onset-----Process----->Result
	[REPRESENT [INITIATE [CAUSE [ RESULT ]]]]

The morphosyntactic realization of different phases of the event in clause structure follows from the inclusion or

exclusion of segments of the event within the scope of attention.

The Newari examples below illustrate how the morphosyntax can vary as a function of the inclusion or exclusion of sections of the event chain. Note that the causative suffix VERB-k- / VERB-kOl- has irregular morphophonemics but takes the regular SET1/SET2 forms.

- (3)       ji:    khapa       cae-k-a  
           1/ERG door/ABS open-CAUSE-PST/SET1  
           "I (intentionally) opened the door."  
  
           [ $x_1$  REPRESENT [ $x_1$  INITIATE [ $x_1$  CAUSE [ y OPEN]]]]
- (4)       ji:    mO-caekO  
           1/ERG un-consciously  
  
           khapa       cae-kOl-O                               ka  
           door/ABS open-CAUSE-PERF/SET2 EMPH  
  
           "I unconsciously opened the door."  
  
           [ $x_1$  INITIATE [ $x_1$  CAUSE [ y OPEN ] ] ]
- (5)       phOsO:   khapa       cae-kOl-O  
           wind/INST door/ABS open-CAUSE-PERF/SET2  
           "The wind opened the door."  
  
           [ $x_1$  CAUSE [ y OPEN ] ] ]
- (6)       khapa       cal-O  
           door/ABS open-PERF/SET2  
           "The door opened."  
  
           [ y OPEN]

#### Summary: Representing Intentional Action

In retrospect, with the exception of Pleines (1978), Talmy (1985), Jackendoff (1985;1987), and DeLancey (1981; 1984; 1985a; 1985b; 1985c, 1986; 1990), analyzing the conceptual structure of intentionality (or volitionality) has not been considered relevant for the problem of accounting for the relationship between

semantic roles and grammatical relations or case. Since the languages used as data did not encode distinctions relevant to the internal structure of intention, there has been no explicit distinction between a representational component or "plan-in-action" and a force dynamic or "initiative-in-action."

The insights from the literature in philosophy, social-cognitive development and language acquisition, and linguistics suggest that the conceptual structure of intentional action includes a representational component (or plan-in-action) plus a force dynamic (or initiative-in-action).

In conclusion, for an individual to say that his or her action was intentional entails: (a) there was a mental plan in which the individual represented the action, (b) there was a force dynamic in which the individual initiated and guided the behavior in accordance with the mental representation.

Furthermore, the assertion has a particular morpho-syntactic and semantic structure. To assert that the action was intentional is to assert that the actor was representing the action in the same manner as the clause describes; recall the case of Oedipus. In other words, as we saw with the case of "premeditation" in Chapter III, the actor's mental representation must be commensurate with the semantic representation of the action clause.

As already noted, this definition further entails that, for non-first persons, intention may only be inferred via indirect means. To the extent that actions by non-first persons exhibit a force dynamic which cannot be directly attributed to some other antecedent cause, intention may be inferred. What is

inferred is the existence of a unique mental event type consisting of the representation and initiation of an action, which our own folk-psychology calls intention. It is expected that languages and cultures will vary with respect to how they express the distinction between directly accessed and indirectly attributed intentionality.

#### The Semantic Representation of Intention in Newari

Intention is represented via a conceptual structure in which the "plan-in-action" or representation is distinguished from the "initiative-in-action" or force dynamic. Distinguishing between these two components in the lexical representation of Newari verbs captures the important differences between the three classes of verbs. The distinction is captured by making three assumptions about the relationship between inflection and the verb stems.

First, as noted above with the English verbs "dive," "tumble," and "fall," lexical structure specifies whether a verb characterizes the type of action which requires, allows, or is incompatible with the initiation of force. The way the information is represented must distinguish between the three classes of verbs.

Second, SET1 inflection indicates that the action, as it is characterized in the verb phrase, was initiated in accordance with an appropriate mental representation by the person of whom the action is being predicated. We know from the use of evidentials that the concept of self-initiated force is not part of the inflectional meaning.

Third, SET2 is the default form, indicating no attested relationship between the force dynamic as characterized in the verb phrase and the representation, i.e., what the actor had in mind. The lack of an appropriate co-indexing between the force dynamic and an actor's mental representation can be a function of three distinct processes:

1. There was no initiation of force to begin with. In other words, the verb is a Non-Control verb, or a Fluid verb which has a Non-Control interpretation. In this case, since there is no self-initiated force, it cannot be matched with a representation.

2. The force dynamic, as characterized by the verb phrase, was initiated, but the action was not in accordance with the appropriate representation. In this case, the verb is a Control verb, but the clause has evidential disclaimers indicating that the force dynamic was not initiated with that plan in mind. This case also entails that the Epistemic Source has authority to confirm that the self-initiated action was not in accordance with the plan.

3. Evidential and epistemic source properties of the speech event constrain the direct assertion of intentional action. Evidential principles prevent the direct assertion that the force dynamic indicated in the verb phrase was, in fact, in accordance with a particular mental representation by the person of whom the action is being predicated. In this case, the actor and the Epistemic Source are not coreferential; hence, the evidential authority is absent.

### The Lexical Structure of Control Verbs

Recall that Control verbs describe actions requiring self-initiated force. With first person subjects, they require SET1 inflection, allowing SET2 inflection only in co-occurrence with evidential operators. The evidential operators indicate an action was initiated, but not in accordance with the actor's representation.

In other words, the force dynamic is conflated in the semantic representation of the action such that it is entailed by a use of the verb and cannot be negated by the inflectional alternation. The selection of an inflectional form for a Control verb indicates whether or not the force dynamic was, in fact, initiated in accordance with the appropriate representation. The conflation of the property of self-initiated force with the lexical meaning of the verb is represented as follows: [INITIATE+VERB].

For example, with a Control verb like dan- 'stand up', the lexical representation describes the basic lexical meaning: some description of "standing," including some notion of [x MOVE] plus a manner component, and so on. It also conflates the force dynamic [INITIATE] as part of the representation: [INITIATE+MOVE]. All this means is that the concept of self-initiated movement is entailed by any use of the verb dan- 'stand up.'

A lexical representation of an inflected SET1 form indicates that the self-initiated force was in accordance with an individual's representation. Furthermore, the individual

must be the Epistemic Source in the speech event, indicated with curly brackets {ES<sub>i</sub>}. The representation below simply identifies the relationship among the three properties which vary independently of one another: (a) an individual initiates a movement, (b) the individual mentally represents the action being initiated, and (c) the individual is in the discourse role of epistemic source.

(7)           ji               dan-a  
          1/ABS           stand-PST/SET1  
          "I stood up."

{ES<sub>i</sub>} [x<sub>1</sub> REPRESENT [x<sub>1</sub> INITIATE+MOVE] ]

Recall that a SET2 form is appropriate with first persons only in the presence of evidential operators. In other words, with Control verbs and first person, SET2 indicates that the initiated behavior was not in accordance with the representation. However, SET2 inflection does not obviate the fact that the action itself requires some initiated force. Thus, with Control verbs, SET2 indicates only the lack of co-indexing for the representational component. The combination will always yield an evidential interpretation in which force is initiated but without awareness, or mental representation. Moreover, this reading is only possible when the Epistemic Source can validate the lack of correspondence between the force and representation.

In example (8) below, the evidential operator mQ-caekO 'unconsciously' indicates that the speaker was not aware of (i.e., not appropriately representing) the action when it was performed. However, the action was performed and did require the initiation of force; there were no other antecedent causal forces. The representation simply indicates that the Epistemic



Source is the person who initiated action, but did not have the appropriate representation.

- (8)           ji           mO-caekO           dan-O           ka  
           1/ABS           NEG-consciously       stand-PERF/SET2 EMPH  
           "I unconsciously stood up."

{ES<sub>i</sub>} [x<sub>j</sub> REPRESENT [x<sub>i</sub> INITIATE+MOVE] ]

When the actor is not the Epistemic Source, the evidential constraint makes it impossible to co-index the representation and the force dynamic. Whether or not the actor did in fact act in accordance with his/her plan is underdetermined, although the preferred inference with a Control verb is that the action was initiated in accordance with the representation.

- (9)           wo           dan-O  
           3/ABS           stand-PERF/SET2  
           "S/he stood up."

{ES<sub>k</sub>} [x<sub>i/j</sub> REPRESENT [x<sub>i</sub> INITIATE+MOVE] ]

Finally, in contexts of reported speech SET1 forms function logophorically. In these cases, the internal Epistemic Source {ES<sub>i</sub>} is assigned by the reported speech operator, either the evidential hō or the verb dhO(1)- 'speak, say' and has scope over the representational component. The external Epistemic Source {ES<sub>j</sub>} is a function of the situated (rather than reported) speech event.

- (10)       wō:       ji       dan-a           dhOkā: dhal-O  
           3/ABS   1/ABS   stand-PST/SET1 COMP   say-PERF/SET2  
           "S/he<sub>i</sub> said, 'I<sub>i</sub> stood up.'"

- (11)       dan-a           hō:  
           stand-PST/SET1   EVD  
           "(S/he<sub>i</sub> said) s/he<sub>i</sub> stood up."

{ES<sub>j</sub>} [ {ES<sub>i</sub>} [x<sub>i</sub> REPRESENT [x<sub>i</sub> INITIATE+MOVE] ] ]

### The Lexical Structure of Fluid Verbs

Recall that Fluid verbs are those which freely take SET1 or SET2 inflection, without requiring that SET2 inflection co-occur with evidential operators. In addition, the use of SET2 with a Fluid verb indicates that the speaker did not initiate the action at all. Thus, unlike Control verbs, Fluid verbs do not have self-initiated force as a default value. With only a few exceptions, they represent "roll," "touch" or "perception" type verbs with alternative interpretations for the causal antecedent of the action.

Unlike Control verbs, the lexical representation of a Fluid verb like dun- 'submerge, sink' must minimally include the [x MOVE] component and the fact that self-initiated force components are "optional." This "optionality" is problematic.

For Control verbs, the SET1/SET2 inflection indicates whether the force dynamic characterized by the verb phrase is attributed to some individual. This indexing is independent of the initiation of force, which is conflated, hence entailed, as part of the lexical meaning of the verb. This account, however, cannot work with Fluid verbs since the lexical meaning of a Fluid verb does not include the force component independent of inflection. With Fluid verbs, inflection itself indicates both components of intention: representation and force.

Thus, there is a problem as to where the semantics of the force dynamic belong. On the one hand, the force dynamic cannot be a property of SET1 inflection because Control verbs are interpreted as having a force component independently of

inflection. This is compelling evidence that the force component is part of the lexical meaning of the Control verb, rather than inflection.

On the other hand, the interpretation of SET1/SET2 with Fluid verbs suggests that both the representational and force components are indicated by inflection. The presence or absence of SET1/SET2 inflection correlates directly with the interpretation of the presence or absence of the force dynamic and representation.

The problem, of course, arises so long as it is desirable to distinguish the semantic properties of lexical stems from the semantic properties of inflections, and describe the meaning of the inflected stem in terms of the meanings of the parts. This compositionality principle is basic and should not be abandoned if possible. The most plausible alternative, then, is that the force dynamic is not represented by SET1 inflection, even with Fluid verbs.

There is an argument in favor of this approach. Consider the two examples below with the Fluid verb napO=la(t)- 'meet' and the pro-forms ya(t)- 'do' and ju(l)- 'become.' In example (12), the pro-form ju(l)- 'become' indicates a non-initiated event.

- (12)       manoj-Ō       syam-yatO ni-kO       gŌlli-e  
           Manoj-ERG   Syam-DAT   two-times alley-LOC  
  
           napO=lat-O  
           meet-PERF/SET2

"Manoj ran into Syam twice in the alley."

jimi pasa-ya   nŌ   Othe he   jul-O  
 1/GEN friend-GEN also like EMPH become-PERF/SET2  
 "And it happened to my friend too."

In contrast, the pro-form ya(t)- 'do' in example (13) indicates that the action was self-initiated.

- (13)       manoj-Ō   syam-yatO ni-kO       gOlli-e  
              Manoj-ERG Syam-DAT two-times alley-LOC  
  
              napO=lat-O  
              meet-PERF/SET2  
  
              "Manoj met him twice in the alley."  
  
              jimi pasā:       nŌ   Othe he   yat-O  
              1/GEN friend/ERG also like EMPH do-PERF/SET2  
              "And my friend did likewise."

Note that the contrast with the pro-forms is functionally independent of SET2 inflection, which occurs in both examples. In other words, the Fluid verb, napO=la(t)- 'meet' admits alternate interpretations of the self-initiated force based on lexical, morphological, or contextual cues; inflection appears to be only one of the possible cues.

The interpretation of the force dynamic with Fluid verbs can be independent of whether the inflectional form is SET1 or SET2. In short, with Fluid verbs, the presence of SET1 inflection entails both the representation and the force components; however, the absence of SET1 entails only the absence of the representational component. This suggests that the semantic relationship between the representation and force components is not bi-directional. Initiation of force does not entail the appropriate representation; however, when SET1 indicates the appropriate representation, it automatically entails self-initiated force.

The source of this entailment is the conceptual structure of intentional action. Asserting the existence of the plan-in-action with SET1 inflection entails the initiative-in-action,

but not the reverse. In more semantic/syntactic terms, another way of putting it would be to say that SET1 inflection has two requirements when it combines with an inflected verb. First, the verb stem must (potentially) have the property of self-initiated force; in this sense, SET1 forms subcategorize for a Control verb. Second, the (subject) NP, which is external to the verb phrase, must be the Epistemic Source. When SET1 inflection combines with a VP, it attributes the appropriate representation to the individual referred to by the (subject) NP, indicating that self-initiated force was in accordance with a representation.

In the case of Control verbs, the force component is already conflated as part of the lexical representation of default values. Hence, the SET1 subcategorization requirements and the VP are redundant.

In contrast, Fluid verbs have no such default values. Lacking any specification, they are still compatible with SET1 inflection; they are simply unspecified. Thus, when SET1 combines with a Fluid verb, it indicates the actor had a representation of the action. The action/event schema for intentional action motivates the entailment that the force component is entailed by any assertion of the representation a force dynamic. This accounts for the fact the interpretation of Control and Fluid verbs is identical when the verb is inflected with a SET1 form. The inflected stem assumes the properties of both stem and inflection, so long as they are not incompatible. This process is essentially the "unification" function argued for in Barlow (1988) and Pollard & Sag (1988).

At the same time, this view also accounts for the difference between Control and Fluid verbs with SET2 forms: Control verbs get an evidential interpretation of SET2 inflection (force but no representation) and Fluid verbs get a non-initiated force interpretation with SET2 (no force and no representation).

Moreover, it follows that in contrast with Control verbs, the use of SET2 forms with Fluid verbs does not require an evidential operator, and indicates that the speaker did not represent or initiate the action. In other words, with Fluid verbs, "optional" means that the use of SET1 to index the representation component entails the presence of the force dynamic in the interpretation of the action/event token. SET2 inflection indicates that there was no indexing of the representational component; consequently, since there is no force component entailed by the lexical stem, the force component is not interpreted.

Fluid verbs with SET1 and SET2 inflection are represented as follows: brackets ( ) are used to indicate the "optional" status of the force dynamic. Again the semantics of the verb dun- 'submerge' are simplified by identifying a basic motion component [x MOVE].

- (14)       ji               lokhO-e   dun-a  
           1/ABS           water-LOC submerge-PST/SET1  
           "I deliberately submerged in the water."

{ES<sub>1</sub>} [x<sub>1</sub> REPRESENT [x<sub>1</sub> (INITIATE+)MOVE]]

- (15)       ji               lokhO-e   dun-O  
           1/ABS           water-LOC submerge-PERF/SET2  
           "I sank in the water."

{ES<sub>1</sub>} [x<sub>j</sub> REPRESENT [x<sub>1</sub> ( )MOVE]]

# The Lexical Structure of Non-Control Verbs

Finally, recall that Non-Control verbs are those which admit only SET2 inflection. They are semantically incompatible with the notion of self-initiated force and SET1 inflection. Thus, for a Non-Control verb like then- 'arrive', the concept of self-initiated cannot be part of lexical structure; hence, there can be no co-indexing with the representational component, or SET1.

- (16)           ji               then-O  
          1/ABS           arrive-PERF/SET2  
          "I arrived."

{ES<sub>1</sub>} [x<sub>1</sub> REPRESENT [x<sub>1</sub> MOVE]]

## Summary: Verb Types and Inflection

The interpretation of SET1/SET2 inflection with Control verbs versus Fluid verbs reveals an important distinction in their lexical representations; also, it provides additional evidence for the distinction between the representational and force domains. It also reveals the functional differentiation of stems and inflection.

Control verbs describe actions which require the self-initiation of force. The meaning described by the lexical stem is conflated with the property of self-initiation. In these cases, inflection indexes the presence or absence of the representational component; the force component is already entailed by the lexical item.

In contrast, Fluid verbs describe actions which can be viewed from alternate perspectives, without or without a force

dynamic. Inflection indicates the presence or absence of the representational component. Indexing of the representational component with SET1 entails the presence of the force dynamic. Consequently, the full interpretation of intentionality with Fluid verbs will vary as a function of inflection.

Finally, Non-Control verbs describe events in which no initiation of force is possible. In these cases, SET2 inflection indicates that no appropriate representation is possible since there is no force dynamic.

The structure of the bare and inflected verbs is summarized below using the contrast among the three verb types in a first person clause.

Lexical stems: MOVE-

- |    |             |                         |
|----|-------------|-------------------------|
| A) | Control     | [x INITIATE+MOVE]       |
| B) | Fluid       | [x (INITIATE)+MOVE]     |
| B) | Fluid       | [x (            )+MOVE] |
| C) | Non-Control | [x MOVE]                |

SET1 inflection: MOVE-a

- |    |         |  |
|----|---------|--|
| A) | Control | {ES <sub>1</sub> } [x <sub>1</sub> REPRESENT [x <sub>1</sub> INITIATE+MOVE]]   |
| B) | Fluid   | {ES <sub>1</sub> } [x <sub>1</sub> REPRESENT [x <sub>1</sub> (INITIATE+)MOVE]] |

SET2 inflection: MOVE-O

- |    |             |  |
|----|-------------|--|
| A) | Control     | {ES <sub>1</sub> } [x <sub>j</sub> REPRESENT [x <sub>1</sub> INITIATE+MOVE]] |
| B) | Fluid       | {ES <sub>1</sub> } [x <sub>j</sub> REPRESENT [x <sub>1</sub> (    ) MOVE]]   |
| C) | Non-Control | {ES <sub>1</sub> } [x <sub>j</sub> REPRESENT [x <sub>1</sub> MOVE]]          |

This chapter has established a conceptual model of intentional action, and argued for a form of lexical representation that accounts for the interaction of the three verb classes with SET1/SET2 inflection. The lexical meaning for a given verb



includes, along with other semantic properties, the information which identifies whether it conflates self-initiated force as part of the meaning.

In contrast, the lexical information for SET1 inflectional forms includes, along with a tense/aspect value, an agreement value [+REPRESENTATION], much like any other type of subject agreement morphology (cf. Barlow 1988; Barlow and Fletcher 1988; Pollard and Sag 1988). In more canonical agreement systems, subject agreement morphology coindexes a VP with a subject NP, where a specific set of semantic properties (e.g., person, number, gender) of the subject NP co-varies with semantic values indexed by verb morphology.

Although the parameters of the Newari SET1 form are somewhat different, the functional role of Newari inflection is similar to agreement morphology:

In the morphosyntax, it coindexes a VP and a (subject/actor) NP, which is external to the VP. In the semantic/pragmatic domain, it indexes certain semantic properties of the (subject/actor) NP. That is, the individual referred to by the (subject/actor) NP has the appropriate representation of self-initiated force and is in the discourse role of epistemic source.<sup>10</sup>

Thus, the schematic structure is mapped onto the morphosyntax as follows:

```
{ESi} [xi REPRESENT [xi INITIATE [ xi MOVE ] ] ]
[ {ES} [ [ INITIATE+MOVE ]VP -REPRESENT ]infl ]s
[ NP [ [ VERB ]VP -SET1 ]infl ]s
```

### Notes

<sup>1</sup>The term "force dynamics" comes from Talmy (1988) where he argues persuasively for the subsumption of "causality" under the larger conceptual domain of force dynamics. Talmy's concept of force dynamics includes self-agentive (self-initiated) motion as well as more complex notions like "let" and "prevent." I use the term "mental representation" as a cover term for the unique mental state that represents and accompanies a self-initiated behavior (cf. Brand 1981).

<sup>2</sup>As we already saw in Chapter III, the issue of whether the relevant concept in Newari requires some notion of "conscious" vs. "unconscious" is problematic; how do we define the opposition in the first place?

<sup>3</sup>Note here that the issue of (moral) responsibility is distinct from intention. That is, it is possible that the person did not intentionally break the string, but by intentionally pulling on it is responsible for breaking the string. In the actual realization of the Newari SET1/SET2 system in the on-going construction of social/cultural life, the degree to which the attribution of responsibility is conflated with the attribution of intention is unclear. The importance of this conflation should not be discounted, but the ethnographic data required to study it is far beyond the scope of the work here.

<sup>4</sup>The term "initiative" is not used here to mean wants, desires, or ambitions of the actor but rather the motivating or animating force itself. As with the term "plan-in-action", the term "initiative-in-action" means that the force is constitutive of the intentional action.

<sup>5</sup>There are two other problems, orthogonal to our own concerns:

First, there must be a causal account for how a mental event or component of "mind" can causally affect the "body" and initiate the performance of action. In other words, as typically conceived, propositional attitudes lack the appropriate causal properties for explaining behavior, especially "intentional action".

Second, even if we assume some causal property attributed to the mental event, is the mental event itself to be given a causal explanation? In other words, if some specialized mental act like "willing" or "volition" causes "action", then what causes "willing" or "volition"? If mental events themselves have no causal explanation, then we have simply pushed the causation question back one step. If we say that the mental events are themselves caused by some prior mental event, then we are in danger of falling into an infinite regress. For an argument which undermines the problem of infinite regress or "intentional intending," see Brand (1970).

<sup>6</sup>Note here that volition is "attributed" to the Agent. For a semanticist as insightful as Jackendoff, this is clearly a hedge. As we have seen, "attribution" is a term applicable for non-first person statements, but not for first person statements, in which intention is directly accessible. Thus, the use of the term "attribution" suggests that Jackendoff is only considering the non-first person view.

<sup>7</sup>Note that Vendler's aspectual categories (Vendler 1967; Dowty 1979; Van Valin 1990) "state", "activity", "accomplishment," and "achievement" are all defined relative to an event's duration and result, to the exclusion of onset properties. For this reason alone, they are not likely to be able to accommodate the more complex notion of intentional action.

<sup>8</sup>What I have identified as the two components of intentional action is termed "act of volition" by DeLancey (1990:302).

<sup>9</sup>This example is extremely awkward and is intended merely to illustrate the full periphrase with the verb dhO(1)- 'say, speak'.

<sup>10</sup>On the formal machinery for characterizing belief states for discourse participants see Fauconnier (1985), Kamp (1990) and Sells (1987).

## CHAPTER V

## CASE

As we noted in Chapter I, the concept of intentional action is part of the agent thematic role in the canonical transitive clause. If this is indeed the case for Newari, then it follows that the distinction among Control, Non-Control, and Fluid verbs will have parallel morphosyntactic reflexes specifically related to the mapping between thematic roles and the morphosyntax of grammatical relations or case. This chapter examines the distribution of case marking in relation to the lexical properties of Newari verbs.

The data show that the mapping relations between the conceptual structure of intentional action and the inflectional system do not directly interact with the mappings between thematic roles and case marking. Instead, the case assigning properties are a function of mappings between a conceptual Source>Trajector>Goal schema and argument structures, independent of the grammaticalized force dynamics of intentional action and SET1/SET2 inflection. This raises important questions about the functional architecture of the semantics/syntax mappings. To see why this non-interaction between inflection and case is important, it may be useful to review briefly the claims thus far.

Chapters III and IV argued that the conceptual structure of intentional action consists of two domains: a

representational domain and a force dynamic. The notion of a self-initiated force is incorporated as part of the lexical structure of Control verbs; it is unspecified for Fluid verbs and incompatible with the meaning of Non-Control verbs.

In semantic terms, the occurrence of SET1 inflection expresses the fact that the force dynamic was in accordance with the actor's representation or plan. In other words, the SET1 form indicates that the action was intentional. In syntactic terms, SET1/SET2 inflection is a function which co-indexes a predicate phrase (the verb phrase) and an NP external to the predicate phrase (subject). As part of the discourse function of finite inflection, SET1 indexes the tense/aspect grounding as well as the evidential constraints in the speech event.

Central to the characterization thus far is the idea that the force dynamic has a different status in the lexical structure of each of the three verb types. The distribution of inflectional forms relative to the verb stems is determined, in part, by the three way lexical categorization: Control, Fluid, Non-Control. The three way distribution is semantically motivated, but grammaticalized. For example, verbs like nhil- 'laugh' and khwo(1)- 'cry, weep' might easily be given non-intentional interpretations and be considered Fluid or even Non-Control verbs. Yet, they are regularly treated as Control verbs. Similarly, there is no inherent reason why Non-Control verbs such then- 'arrive' and tya- 'win, succeed' couldn't potentially admit intentional interpretations, and act like Fluid verbs. Instead, as shown in Chapters III and IV, there are three distributional patterns which must be represented as

part of lexical information for stems and inflections. This lexical information must be represented in such a way as to account for the distribution and markedness properties of finite inflection.

The conceptual structure for intentional action, including the evidential properties, underlies the behavior of verbs and inflections in the grammar. This schema integrates information from the lexical properties of verb classes and finite inflectional forms, combined with the speech act and evidential role of the referents in a discourse interaction. The schema constructs notions like "intentional action" and "epistemic source"; however, the actual distribution of lexical and inflectional tokens must be a function of the relevant information represented in lexical items. In other words, to be functional in a morphosyntactic system, the conceptual properties must be grammaticalized.

As noted in the introduction in Chapter I, our ability to talk about events includes more than just an ability to distinguish between self-initiated or non-initiated force dynamics. Other important properties of events are distinguished and expressed in the grammatical behavior of verbs and their arguments.

For example, the inherent meaning of a verb also includes a schema for characterizing the roles of participants in the events and the syntactically relevant distinctions among these roles. This would include distinctions which are relevant whenever the verb appears as the lexical head in a clausal syntactic environment. These distinctions determine, in part,

the morphological shape of the noun phrases that appear in argument positions specified by the verbs inherent meaning. In other words, these conceptual and syntactic properties underlie the assignment of case roles to NPs.

A strict iconicity or structure preservation approach to the mapping between conceptual structure and the morphosyntax would predict that: (a) since the concept of intentional action is subsumed within the larger concept of an agent, and (b) the agent role is subsumed with the transitive mapping schema for thematic roles and case, (c) the SET1/SET2 inflection reflexes of intentional action should also be subsumed within the domain of thematic roles and case.

This chapter examines whether this is, in fact, true. In other words, this chapter investigates whether the conceptual structure of intentional action and the lexical structures underlying the three verb types are in any way related to the mappings between thematic roles and the morphosyntax of case in simple clauses.

#### Newari Case Marking

In Newari, case is realized morphologically via nominal suffixes. In addition to the zero marked Absolutive case, the morphologically marked cases are: Ergative -nŏ, Dative -(va)tŏ, Associative, or Animate Locative -(va)ke, Inanimate Locative -e, Ablative/Instrumental -nŏ and Genitive -ya. The full range of distributions for case forms has been outlined in several excellent studies, especially Kölver (1976) and Hale and Manandhar (1980). The goal here is to examine the co-occurrence

relationship between the three verb classes and the distribution of case forms.

#### Core Case and the Source>Goal Schema

Case syncretism in Newari provides evidence for a conceptual schema which underlies the core cases of Ergative, Absolutive, and Dative (Hale and Manandhar 1980; Kölver 1976). The case suffix -nŌ marks an abstract Source category, including locative source, causal sources such as instrumentals, transitive agents, and causal subordinate clauses. In contrast, the suffix -(ya)tŌ marks an abstract Goal category, including such traditional Dative functions as recipients, benefactives, animate patients, and experiencers, as well as purpose infinitive clauses. The unmarked (Absolutive) form occurs with canonical themes or inanimate patients. Prototypically, they are objects or individuals which undergo motion or change of state relative to some Source/Goal trajectory. I will use the term "trajector" when referring to the conceptual schema; I will use the term "theme" as a simple mnemonic along the same lines as agent, recipient, etc.

#### The Abstract Category of Source: -nŌ

In example (1), the suffix -nŌ marks directional Source, or Ablative; the Absolutive stem is hitɪ 'water tap' (nasalization plus vowel lengthening occurs as a regular allomorph).

- (1)            ɭŌ            hitɪ:            pihā=wŏɭ-Ō  
                  water/ABS tap/ABL    out=come-PERF/SET2  
                  "Water came out of/from the tap."

The suffix -nŌ can mark Instrumental functions.



- (2)        lhat-Ø        nO-e        jiu        la  
              hands-INST eat-INF    good/IMPERF/SET2 Q  
              "Is it OK to eat with (my) hands?"
- (3)        cupI:        ya-e        jiu        la  
              knife/INST do-INF    good/IMPERF/SET2    Q  
              "Is it OK to do it with a knife?"

The suffix also marks transitive agents with Ergative case; the first person Absolutive form of the pronoun is ji.

- (4)        ji:        wo-yatØ        dheba        biy-a  
              1/ERG 3-DAT        money/ABS give-PERF/SET2  
              "I gave him/her money."

The suffix also marks transitive cognizers with Ergative case, a problematic category of Non-Control verbs assigning Ergative case. We will return to this class below.

- (5)        ji:        siu:  
              1/ERG        know/IMPERF/SET2  
              "I know (it)."

Finally, it marks Causal subordinate clauses (cf. Genetti 1986; to appear; Hargreaves 1984). In the example below, nasalization marks the causal interpretation for the subordinator -guli.

- (6)        bhukhae bwo:-guli:        ji        pihā=won-a  
              earthquake-SUBORD/CAUS 1/ABS out=go-PST/SET1  
              "Because of the earthquake, I went outside."

#### The Abstract Category of Goal: -(ya)tØ

The suffix -(ya)tØ marks a variety of Goal functions. The Goal category includes Recipients of transfer verbs:

- (7)        laxmi:        ji-tØ        dheba        bil-Ø  
              Laxmi/ERG 1-DAT money/ABS give-PERF/SET2  
              "Laxmi gave me money."

and Benefactives:

- (8)        ji:        laxmi-yatØ        ja        thuy-a  
              1/ERG Laxmi-DAT rice/ABS cook-PST/SET1  
              "I cooked rice for Laxmi."

The Goal function includes affected Animate Patients:

- (9)            laxmi:     ji-tO     dal-O  
               Laxmi/ERG 1-DAT   beat-PERF/SET2  
               "Laxmi hit me."

Experiencers are also marked as Goal. The Goal function can be overt as in the example with the verb wo(1)- 'come' below:

- (10)           ji-tO            jor            wol-O  
               1-DAT           fever/ABS   come-PERF/SET2  
               "I got a fever."  
               (11)           wo-yatO        boksi            wol-O  
                               3-DAT        witch/ABS   come-PERF/SET2  
                               "S/he was possessed/bewitched."

Or implicit in the case of sensory verbs:

- (12)           ji-tO            sekO            cal-O  
               1-DAT           cold/ABS        feel-PERF/SET2  
               "I got a cold."  
               (13)           ji-tO            tyanul-O  
                               1-DAT           be.tired-PERF/SET2  
                               "I became tired."

Finally, Purpose clauses are marked as Goal:

- (14)           Oela            ka-e-tO  
               liquor/ABS   get-INF-DAT  
               "To make eila (liquor),  
               mi            du-e            ma:  
               fire/ABS   burn-INF   need/IMPERF/SET2  
               you have to distill (it)."  
               (15)           ja            nO-e-tO            won-a  
                               rice/ABS   eat-INF-DAT   go-PST/SET1  
                               "(I) went in order to eat."

Summary: Source: -nO and Goal: -(ya)tO

Newari case marking syncretism manifests a Source/Goal schema. Spatial and causal dynamics are represented as proceeding from Source (Agents, Cognizers, Instruments, Ablatives) to Goal (Recipients, Benefactives, Patients, Experiencers). Causal antecedent events are marked as Source and purposeful

future actions are marked as Goals. The syncretism is diagrammed below:<sup>1</sup>

<u>-nō</u>	<u>-(ya)tō</u>
SOURCE	GOAL
Agent	Patient
Cognizer	Experiencer
Ablative	Benefactive
Instrumental	Recipient
Causal Subordinate	Purpose Subordinate

Given this case syncretism, consider again the canonical transfer schema for a verb such as bi(l)- 'give.' Clauses with the three argument verb maximally differentiate the three core argument roles. In the canonical mapping, the Theme/Trajector (object which undergoes motion or change) is marked with the zero Absolutive form. It moves from Ergative/Source to the Dative/Goal.

As noted in Chapter IV, the notion of Theme here is simply a convenient mnemonic for argument positions in lexical decomposition (Jackendoff 1983; 1990):<sup>2</sup>

[Theme MOVE]

[Theme BECOME]

Agent is prototypically found in two argument predicates like:

[Agent, [ Event ] CAUSE ]

[Agent, [ Event ] DO ]

Dative/Goal is typically the argument of a complex predicate with some kind of directional meaning:

[ [Goal TO], Theme MOVE ]

This is informally illustrated below:

- (16)       ji:    laxmi-yatō       dheba       biy-a  
           1/ERG Laxmi-DAT       money/ABS   give-PST/SET1  
           "I gave Laxmi (the) money."

bi(1)- 'give'

SCHEMATIC  
REPRESENTATION

Source----->Trajector----->Goal  
(x) Agent---->(y) Theme----->(z) Recipient

LEXICAL STRUCTURE

{ x        [ [ z        TO ] y        MOVE] CAUSE]  
[ Agent [ [ Goal        ] Theme GIVE ] ]

CASE ASSIGNMENT

(x)ERG (z)DAT (y)ABS GIVE

The idea here is simply that generalizations about predicate types identify the prototypical roles that event participants assume relative to one another in a Source/Goal schema. Generalizations about predicate types allow the use of mnemonics such as agent, theme, recipient, etc. In the mapping relations between the schematic structures and the case system, we are interested in three formally marked categories for core arguments: Ergative, Absolutive, and Dative. These three formally marked categories correspond in the canonical ditransitive clause to Source, Trajector, and Goal, respectively. For now, it is possible to assume that the mappings are isomorphic, i.e., structure preserving. That is, distinctions at the schematic level (Source>Trajector>Goal) are directly preserved in the morphosyntactic distinctions in case forms (Ergative, Absolutive, Dative). There will be reasons to question this below.<sup>3</sup>

Case, Valency, and Verb Types

Single Argument Verbs

Single argument Control verbs assign Absolutive case:<sup>4</sup>

[ABS] [INITIATE+VERB]

- (17)           ji           won-a  
              1/ABS       go-PST/SET1  
              "I went."
- (18)           ji           den-a  
              1/ABS       lie-PST/SET1  
              "I laid (down)/slept."

Single argument Fluid verbs also assign Absolutive case:

[ABS] [(INITIATE)+VERB]

- (19)           ji           gwara=tul-a  
              1/ABS       roll-PST/SET1  
              "I intentionally rolled over."

[ABS] [(            )+VERB]

- (20)           ji           gwara=tul-O  
              1/ABS       roll-PERF/SET2  
              "I unintentionally rolled over."

Single argument Non-Control verbs also assign Absolutive:

[ABS] [VERB]

- (21)           ji           libakko    then-O  
              1/ABS       late        arrive-PERF/SET2  
              "I arrived late."
- (22)           ji           gyat-O  
              1-ABS       fear-PERF/SET2  
              "I became afraid."

Case assignment with single argument verbs shows that the concept of a self-initiating force, while morphosyntactically relevant for the determination of SET1/SET2 inflection, is not morphosyntactically relevant for the assignment of Absolutive case. The case system does not realize any "active/stative" or "split-S" distribution, although the "active/stative" pattern is

covert in the semantics of the force dynamic and the distinction between Control and Non-Control verbs.

However, there is another type of split distribution for intransitive case marking. There is a set of verbs which assign the Dative case to their single argument. Consistent with the idea that the Dative case marks an abstract Goal category, Dative intransitives are, without exception, Non-Control, experiencer verbs:

[DAT] [VERB]

- (23)       ji-tO        cikul-O  
          1-DAT        be.cold-PERF/SET2  
          "I've become cold."
- (24)       ji-tO        nOe=pityat-O  
          1-DAT        be.hungry-PERF/SET2  
          "I've become hungry."

The contrast between Absolutive and Dative intransitives reveals two predicate types within the Non-Control class. That is, there is one type of Non-Control verb which assigns the single argument Absolutive case; the other type of Non-Control verb assigns the single argument Dative case.

In conceptual terms, all of the single argument verbs which take a Dative argument involve internal subjective experiences in which the individual experiences some internal sensation or emotional state. In other words, there is some feature of conceptual structure common to all Dative intransitives verbs which identifies the subjective experience as an instance of the abstract Goal category, distinct from the unmarked Theme/Absolutive category. The transparency of the directional metaphor can be seen in the example below, repeated from (10) above.

- (25)           ji-tO           jor   wol-O  
               1-DAT           fever come-PERF/SET2  
               "I've got a fever."

For mnemonic purposes, we can call this the "experiencer" feature of conceptual structure. Note also that this semantic feature is, in part, lexically specific; all Dative intransitives involve "experiencers," but not all "experiencers" are Dative intransitives.

There is a small class of two verbs which take zero morphology on both nominals. This class includes the equative verb khO(t)- 'be/be.true' and the inchoative verb ju(l)- 'become.' Both verbs share the same morphosyntactic property of taking predicate-like nominals which are not assigned case.

[ABS] [-Ø] [VERB]

- (26)           ji               si:kO:mi   khO:  
               1/ABS           carpenter be/IMPERF/SET2  
               "I am a carpenter."

Whereas the equative verb khO(t)- 'be/be.true' is strictly a Non-Control verb, the verb ju(l)- 'become' can take SET1 or SET2 marking depending on the interpretation of intention. Lacking any motion or body position semantics that typically go with Newari Fluid verbs, it is an unusual Fluid verb.

[ABS] [-Ø] [(            )+VERB]

- (27)           ji       dOkto   jul-O  
               1/ABS doctor become-PERF/SET2  
               "I became a doctor."

[ABS] [-Ø] [(INITIATE)+VERB]

- (28)           ji       dOktoR   juy-a  
               1/ABS doctor become-PST/SET1  
               "I (intentionally) became a doctor."

It is noteworthy that this class of verbs does have a Fluid member; the evidence clearly shows that the interpretation

of intentional action cannot be a function of the relationship between thematic roles and case marking.

#### Two Argument Dative Verbs

There is also a class of two argument verbs which assign Dative and Absolutive marking. These also involve the experienter property seen with the Dative intransitives. In these cases, however, there is an unmarked Absolutive argument. As noted above, these examples reveal the transparency of the directional metaphor: the experience of a sensation or internal mental state is the endpoint or locative goal of a directional schema.

[DAT] [ABS] [VERB]

- (29)       ji-tO       ghO       cal-O  
           1-DAT       disgust    feel-PERF/SET2  
           "I felt disgusted/repulsed."
- (30)       ji-tO       musya       yO:  
           1-DAT       soy beans   be.pleasant/IMPERF/SET2  
           "I like (fried) soybeans."

#### Ergative Case and Control Verbs

There are a few two argument verbs in which Absolutive and Ergative case marking vary relative to the pragmatics of agent focus. They are Control verbs and the Absolutive/Ergative alternation occurs independently of inflection.<sup>5</sup>

- (31)       ji(~)                   pyakhŌ                   lhuy-a  
           1/ABS (ERG)           dance/drama           dance-PST/SET1  
           "I danced."
- (32)       ji(~)                   me   hal-a  
           1/ABS (ERG)           song sing-PST/SET1  
           "I sang a song/songs."



The canonical transitive clause has an Ergative subject and is a Control verb.

[ERG] [ABS] [INITIATE+VERB]

- (33)       ji:    la            tyan-a  
          1/ERG meat       mince-PST/SET1  
          "I minced the meat."

In a few cases, Control intransitive verbs can become transitive. The Locative role is marked with the Absolutive case rather than the Locative case. The alternations between an oblique and core grammatical role affect the occurrence of Ergative case, but are irrelevant for determining SET1/SET2 inflection.

- (34)       ji       sima-e    gOy-a  
          1/ABS tree-LOC climb-PST/SET1  
          "I climbed into the tree."
- (35)       ji:    sima        gOy-a  
          1/ERG tree/ABS climb-PST/SET1  
          "I climbed the tree."
- (36)       ji       tin=tin=nhuy-a  
          1/ABS RDP=jump-PST/SET1  
          "I jumped around."
- (37)       ji       pO:khal-e       tin=nhuy-a  
          1/ABS wall-LOC       jump-PST/SET1  
          "I jumped onto the wall."
- (38)       ji:    pO:kha:    tin=nhuy-a  
          1/ERG wall/ABS jump-PST/SET1  
          "I jumped the wall."

In canonical transitive clauses, inanimate Theme/Patients are marked Absolutive.

- (39)       ji:    jya        yan-a  
          1/ERG work/ABS do-PST/SET1  
          "I did (some) work"
- (40)       ji:    sOphu:    bon-a  
          1/ERG book/ABS read-PST/SET1  
          "I read a book."

With certain verbs taking inanimate Patients, either Absolutive or Locative marking is possible. Again, the case marking alternation does not affect SET1/SET2 inflection (cf. Hale & Manandhar 1980; Langacker 1986).

- (41)      chŏ:    cae lasa                    day-a-gu  
              2/ERG why mattress/ABS beat-PST/SET1-NOM  
              "Why did you beat the mattress?"
- (42)      chŏ:    cae lasa-e                  day-a-gu  
              2/ERG why mattress-LOC beat-PST/SET1-NOM  
              "Why did you beat on the mattress?"

In two argument clauses with an Ergative argument and a Control verb, an animate Theme/Patient can be marked with the Absolutive or Dative. Dative marking has a variety of semantic and pragmatic nuances; typically Dative marking indicates greater affectedness and/or discourse saliency of the Patient.

[ERG] [DAT] [INITIATE+VERB]

- (43)      jī:    kha                                  jon-a  
              1/ERG chicken/ABS                  grab-PST/SET1  
              "I picked up/held the chicken."
- (44)      jī:    kha-yato                          jon-a  
              1/ERG chicken-DAT                  grab/hold-PST/SET1  
              "I seized/grabbed the chicken."
- (45)      jī:    pasa                                  swoy-a  
              1/ERG friend/ABS                    watch-PST/SET1  
              "I watched (my) friend."
- (46)      jī:    pasa-yato                          swoy-a  
              1/ERG friend-DAT                    watch-PST/SET1  
              "I watched/observed (my) friend."
- (47)      jī:    solo                                  goy-a  
              1/ERG horse/ABS                    climb-PST/SET1  
              "I mounted the horse."
- (48)      jī:    solo-yato                          goy-a  
              1/ERG horse-DAT                    climb/ride-PST/SET1  
              "I rode the horse."

A few verbs which entail a high degree of affectedness require Dative marking when the Theme/Patient is animate.

(49) chŌ: cae mŌca-yatŌ day-a-gu  
 2/ERG why child-DAT beat-PST/SET1-NOM  
 "Why did you hit the child?"

(50)?? chŌ: cae mŌca day-a-gu  
 2/ERG why child/ABS beat-PST/SET1-NOM

To the extent that intentional action and the SET1/SET2 alternation are not involved with case marking, the case alternations between Absolutive and Dative marking on Patients is not of primary concern here. The principles which govern the Dative/Absolutive alternation are consistent with the principles of object affectedness and referential saliency in the transitive prototype (Hopper & Thompson 1980; Lakoff 1977).

Recall that it is in the maximally differentiated event frames that the canonical values for the case forms are evident relative to the Source/Goal schema. The ditransitive frame is given below:

[ERG] [DAT] [ABS] [INITIATE+VERB]

(51) ji: tara-yatŌ bona=pŌu ken-a  
 1/ERG Tara-DAT invitation/ABS show-PST/SET1  
 "I showed the invitation to Tara."

#### Ergative Case with Fluid and Non-Control Verbs

Despite the canonical alignment of causal Source (Ergative) and self-initiated force (with SET1 inflection), the concept of self-initiated force is not morphosyntactically relevant for the determination of Ergative case in Newari. The most obvious evidence comes from transitive Fluid verbs allowing either SET1 or SET2 inflection. They do not show adjustments in case marking relative to the Fluid interpretations.

[ERG] [ABS] [(INITIATE)+VERB]

- (52)       ji:    ja                   thiy-a  
           1/ERG rice/ABS           touch-PST/SET1  
           "I (intentionally) touched the rice."

[ERG] [ABS] [(            )+VERB]

- (53)       ji:    ja                   thil-O  
           1/ERG rice/ABS           touch-PERF/SET2  
           "I (unintentionally) touched the rice."

As with other transitive verbs assigning Ergative case, animate Patients can just as well be construed as Goals and take Dative marking.

[ERG] [DAT] [(INITIATE)+VERB]

- (54)       ji:    wo-yatO            thwan-a  
           1/ERG 3-DAT               bump w/foot-PST/SET1  
           "I (intentionally) kicked him/her."

[ERG] [DAT] [(        )+VERB]

- (55)       ji:    wo-yatO            thwat-O  
           1/ERG 3-DAT               bump w/foot-PERF/SET2  
           "I (unintentionally) bumped him/her."

In other words, in simple clauses, the semantic notion of causal source and the syntactic notion of transitive valency are the two primary determinants of Ergative case in Newari, not the notion of self-initiated force. In contrast, the notion of self-initiated force underlies the Control, Non-Control, Fluid distinction. Varying independently of one another, the systems do not interact.

Further evidence comes from a class of transitive Non-Control verbs which subcategorize for Ergative case marking. They categorially take SET2 inflection and Ergative case. The verbs are primarily psych/cognition verbs, e.g., si(1)- 'know', thu(1)- 'realize, understand', mhOn- 'dream', lumOn- 'remember' and lwOmOn- 'forget.' The Ergative Non-Control verbs

all refer to some type of mental activity (in contrast to both physical activity and physical sensation) and hence will be referred to as the class of cognition verbs.

As an example, the verb thu(1)- 'realize, understand' requires both Ergative and SET2 inflection, allowing no other combination of case and inflection.

[ERG] [ABS] [VERB]

- (56)       ji:    wo-ya-gu   khŌ    thul-O  
             1/ERG 3-GEN-ATR matter understand-PERF/SET2  
             "I understand his point."
- (57)\*       ji:    wo-ya-gu   khŌ    thuy-a  
             1/ERG 3-GEN-ATR matter understand-PST/SET1
- (58)\*       ji     wo-ya-gu   khŌ    thul-O  
             1/ABS 3-GEN-ATR matter understand-PERF/SET2
- (59)\*       jii-tŌ wo-ya-gu   khŌ    thul-O  
             1-DAT 3-GEN-ATR matter understand-PERF/SET2

Summary: Conceptual Structure  
and the Morphosyntax

In Chapter I, it was noted that both cognitive-functional and formal theories propose some structure-preserving principle for the mapping between the conceptual structure of an event and the argument structure of the verb which expresses that event.

Thus far, the data show that the lexical structure of the Newari verb has two distinct systems for mapping between conceptual structure and the morphosyntax. In one system, the conceptual structure of intentional action, specifically the force dynamic, underlies the distinction between Control, Fluid, and Non-Control verbs, and the distributional possibilities of SET1/SET2 inflection with verb stems. In another system, the Source>Trajector>Goal schema and argument structure determine

the distribution of case forms, (Ergative, Absolutive, Dative) in simple clauses.

The two systems do not appear to interact, except in one sense: Goal and self-initiated force are incompatible. Both Ergative/Source and Absolutive/Trajector occur with all three classes of verbs: Control, Non-Control, and Fluid. Hence, the semantics of self-initiated force can not be functionally relevant for determining case roles. However, all Dative/Goal (intransitive or transitive) verbs are Non-Control verbs. Indeed, it is hard to imagine otherwise. This suggests that at some level of conceptual structure, the concept of Goal and the concept of self-initiated force are notionally incompatible.

#### Control Verbs

Although Source and self-initiated force do not directly interact, with a prototypical ditransitive Control verb such as bi- 'give', the Agent, Source, and self-initiated force are aligned.

Represent-->	Initiate-->	Cause-->	Move----->	Be At
Source----->			Trajector----->	Goal
Agent----->			Theme----->	Recipient

[ERG] [DAT] [ABS]      [INITIATE+VERB]

With the prototypical transitive Control verb such as tya(t)- 'cut, mince' or da(l)- 'hit', the Agent, Source, and self-initiated force are aligned. Animacy, affectedness, and discourse saliency function to determine whether the non-Agent is coded as Absolutive or Dative. Since the distinction between Trajector and Goal is collapsed into a single argument position,

the two coding options may vary relative to semantic and pragmatic functions.

Represent->Initiate->Cause->Become  
 Source----->Trajector/Goal  
 Agent----->Patient

[ERG] [ABS] [INITIATE+VERB]  
 [ERG] [DAT] [INITIATE+VERB]

With the prototypical intransitive Control verb such as won- 'go' or dan- 'stand', the Trajector and self-initiated force are aligned. With Control intransitives, the Source/Trajector distinction is collapsed in much the same way the Goal/Trajector distinction is collapsed in canonical transitive clauses. As DeLancey points out, in Lhasa Tibetan, active volitional motion verbs admit Ergative marking (1985a: 1985b; 1985c). In Newari, however, Ergative case does not occur when Source/Trajector are collapsed.

Represent->Initiate->Move->(Be At)  
 Source/Trajector----->(Goal)  
 Theme----->(Locative)

[ABS] [INITIATE+VERB]

#### Non-Control Verbs

The semantic structure of Non-Control Verbs is not compatible with self-initiated force. Relative to case assigning properties, there are four major classes of Non-Control verbs:

The distinction between Dative and Absolutive Non-Control verbs is the most distinct. With Absolutive Non-Control verbs such as then- 'arrive' or kutū wo(1)- 'fall come', self-initiated force and Trajector are not aligned. In fact, self-initiated force is not present in the schema.<sup>6</sup>

Move----->Be At  
 Trajector---->Goal  
 Theme----->(Locative)

[ABS]            [VERB]

With Absolutive Non-Control verbs such as bu(t)- 'lose, fail' or pya(t)- 'be.wet', self-initiated force is not present in the schema; the Trajector changes state rather than location.

Become----->  
 Trajector---->  
 Theme----->

[ABS]            [VERB]

Finally, there are two types of Dative Non-Control verbs: one and two argument verbs. In both cases, the Dative argument is an experiencer of some type. With single argument verbs such as nOe=pitya(t)- 'be.hungry' or ciku(l)- 'be.cold', there is no Trajector, only a change of state. What distinguishes Dative Non-Control verbs from Absolutive Non-Control verbs is the fact that the experience is identified as Goal.

----->Become  
 ----->Goal  
 ----->(DAT)Experiencer

[DAT]            [VERB]

With the two argument verbs such as ye(l)- 'be.pleasing to' or jora wo(l)- 'fever come' the Trajector/Absolutive role assumes (metaphorical) motion while the Experiencer aligns with the Goal/Dative (cf. Lakoff and Johnson 1980).

Move----->Be At  
 Trajector----->Goal  
 (ABS) Theme----->(DAT)Experiencer

[DAT] [ABS] [VERB]

Most problematic are the cognition verbs, which are Non-Control verbs taking Ergative case. In other words, the Source/



ergative role does not co-occur with self-initiated force. It is unclear just what semantic properties account for the Ergative/Source marking. Since cognition verbs such as thu(1)- 'realize, understand' and lumon- 'remember' are such a problematic class they are provisionally diagrammed as follows and examined in more detail in Chapter VI:

```
Source----->Trajector
Cognizer----->Object of cognition

[ERG] [ABS]      [VERB]
```

### The Problem of Ergative Non-Control Verbs

This chapter has argued that the Source>Trajector>Goal conceptual schema underlies the assignment of case forms: Ergative, Absolutive, Dative. The example of the canonical transfer verb bi(1)- 'give' suggested iconic mappings between the conceptual schema Source>Trajector>Goal and the case forms Ergative, Absolutive, Dative.

The assumption in this chapter has been that formal case syncretism entails a semantic unity among all of the argument roles which take a certain form, either source or goal. Making a hypothesis about semantic structure on the basis of shared case assigning properties in simple clauses entails that all transitive verbs assigning Ergative case should share properties with respect to the concept of Source, which underlies the assignment of Ergative case. From this assumption comes a prediction that Ergative verbs should all share a common lexical semantic property which maps Source and Ergative case.

This structure preservation principle makes other predictions. It predicts that the Ergative non-Control verbs, which identify "cognizers" as a sub-type of Source, should have no similarity with Dative Non-Control verbs, which identify "experience" as proceeding to a Goal, i.e., the "experiencer." Although both cognition and experiencer verbs belong to the class of Non-Control verbs, the case assigning properties suggest that there should be no grammatically relevant similarities between Ergative cognition verbs and the Dative experiencer verbs. The only similarity between the two appears to be that both types lack self-initiated force. Since it is a property they have in common with all other Non-Control verbs, as well as Fluid verbs with Non-Control interpretations, this similarity is not significant for cognition and experiencer verbs alone. The set of Ergative and Dative verbs is contrasted below:

#### Verbs Assigning Ergative Case

jon- 'grab':

[ERG]	[ABS]	[INITIATE+VERB]
[ERG]	[DAT]	[INITIATE+VERB]

bi(1)- 'give':

[ERG]	[DAT]	[ABS]	[INITIATE+VERB]
-------	-------	-------	-----------------

thi(1)- 'touch':

[ERG]	[ABS]	[ (INITIATE) +VERB ]
[ERG]	[ABS]	[ (                    ) +VERB ]

thu(1)- 'realize, understand':

[ERG]	[ABS]	[V]
-------	-------	-----

## Verbs Assigning Dative Case

tynau(1)- 'be.tired':

[DAT] [VERB]

ye(1) - 'be.pleased, like':

[DAT] [ABS] [VERB]

In summary, the structure preservation principle for mappings between conceptual structure and case marking makes two predictions about the cognition verbs, i.e., Non-Control verbs assigning Ergative case. First, it predicts that they should have lexical structures like all the other transitive verbs assigning Ergative case, both Control and Fluid. Second, it predicts no structural similarity between the cognition verbs (Ergative, Non-Control) and the experiencer verbs (Dative, Non-Control). In fact, both of these predictions turn out to be false.

There is an important set of facts which show that cognition verbs have a different lexical structure than other transitive verbs; moreover, they share this lexical property with the experiencer/sensation verbs. More interestingly, it is a lexical property which is not reducible to the fact that cognition and experiencer verbs are both Non-Control verbs. To see why this is so, it is necessary to look at the formation of causative structures. This is the topic of Chapter VI.

### Notes

<sup>1</sup>Since the complications are not relevant for the discussion, I am putting aside the description of the animate, locative source marker -(ya)ke occurring in sentences such as the following:

- (1)            laxmi:     ji-ke dheba        kal-O  
                  Laxmi/ERG 1-SRC money/ABS take-PERF/SET2  
                  "Laxmi took the money from me."

<sup>2</sup>The ordering of arguments is not relevant here.

<sup>3</sup>The status of grammatical relations and "subjecthood" in Newari is problematic. Hale and Watters (1973) suggest that "subjecthood" per se is not relevant for characterizing Newari clause structure. Without agreement, passivization, or clause-bound reflexives, arguments for subjecthood in Newari are naturally equivocal. Since nothing in my paper is dependent on arguments for or against the status of subjecthood in Newari, I will continue to use the term in an informal sense.

<sup>4</sup>There is one intransitive verb that I know of that assigns Ergative case: ul- "bark" (Kölver 1976). I have no explanation for this, although it may have had origins as an utterance verb which was transitive.

<sup>5</sup>Since the semantic and syntactic status of the "cognate object" is not the main issue here, we will not pursue arguments concerning the status of the direct object with these verbs. The point is that the Absolutive/Ergative alternation is governed by factors independent of intentional action.

<sup>6</sup>Minimal contrasts between a Control verb such as wo(1)- 'come' and a Non-Control such as kutū wo(1)- 'fall come/hither' demonstrate that the distinction between Control and Non-control intransitives is not an aspectual distinction as Van Valin (1990) has argued for some split intransitive oppositions. Although aspectual contrasts such as wo(1)- 'come' vs. then- 'arrive' are typical of Control/Non-Control contrasts, the minimal contrast between Control and Non-control verbs is only fully accountable on the basis of onset dynamics, i.e., self-initiated force.

## CHAPTER VI

## CAUSATIVES AND LEXICAL STRUCTURE

The distribution and interpretation of the productive causative suffix -k-/-kOl- reveals another important aspect of lexical structure. In the canonical causative process, the causative suffix adds a causative agent role to the event schema of a simple non-causative verb. With a causative suffix, the event schema describes a causative agent acting to bring about the simple caused event. I will refer to these type of causatives as "effective" causatives.

However, there is a class of verbs, primarily cognition (Ergative Non-Control) verbs and experiencer (Dative intransitive and transitive) verbs, which behave differently from the rest of the verbs. With these verbs, the causative suffix does not add a new participant to the event schema; instead, it creates an interpretation where non-initiated events of cognition and experience become self-initiated events. I will refer to these type of causatives as "affective" causatives; they are interpreted like middle-voice constructions (cf. Klaiman 1988).<sup>1</sup>

Reflexes of the PTB Causative Prefix \*s-

Before examining the productive causatives, it is important to note a set of non-productive causative pairs. Non-productive causatives involve a restricted set of intransitive verbs and their transitive counterparts. The simple/causative

alternation, a reflex of the Proto Tibeto-Burman causative prefix \*s-, is realized via a voiced/voiceless aspirated allomorphy for stem initial consonants (Hale 1973; Hargreaves & Tamot 1987; Malla 1984).

With the causative form, the causer is marked with the Ergative case. Animate causees are marked with the Dative; inanimate causees are Absolutive. Simple forms can be Control, Fluid, or Non-Control. The causative form is always a Control verb. Some examples are given below:

Control-Verb: den- 'lie' / then- 'lay'

- (1)           ji               den-a  
1/ABS       lie.down-PST/SET1  
"I lay down."
- (2)           ji:               wo-yatO       then-a  
1/ERG       3-DAT       lay-PST/SET1  
"I laid him/her down"
- (3)           wō:               ji-tO       then-O  
3/ERG       1-DAT       lay-PERF/SET2  
"S/he laid me down"

Fluid: dun- 'submerge' (intrans) / thun- 'submerge' (trans)

- (4)           ji               lokhO-e               dun-a  
1/ABS       water-LOC       submerge-PST/SET1  
"I dipped into the water."
- (5)           ji               lokhO-e               dun-O  
1/ABS       water-LOC       submerge-PERF/SET2  
"I unintentionally sank into the water."
- (6)           ji:       wo-yatO lokhO-e               thun-a  
1/ERG 3-DAT   water-LOC       submerge-PST/SET1  
"I dipped him/her into the water."
- (7)\*          ji:       wo-yatO   lokhO-e               thun-O  
1/ABS 3-DAT   water-LOC       submerge-PERF/SET2
- (8)           wō:       ji-tO       lokhO-e               thun-O  
3/ERG 1-DAT   water-LOC       submerge-PERF/SET2  
"He/she dipped me into the water."

Non-Control Verb: gya- 'be.afraid' / khya- 'frighten'

- (9)       ji     gyat-O  
           1     fear-PERF/SET2  
           "I became afraid."
- (10)       jī:    wo-yatO     khyān-a  
           1/ERG 3-DAT     frighten-PST/SET1  
           "I frightened him/her."
- (11)       wō:    jī-tO       khyat-O  
           3/ERG 1-DAT     frighten-PERF/SET2  
           "S/he frightened me."

### The Causative Suffix -kOl-/-k-

Most important for our purposes is the productive causative. As with the non-productive causative, an animate causee is marked with the Dative case; an inanimate causee is marked Absolutive. The causative agent is marked Ergative. Although it is irregular in its stem morphophonemics, the causative stem inflects like a Control verb.

### Effective Causatives

Effective causatives form the canonical causative construction. There are minimally two referentially distinct participants; the causer and the causee. With most single argument Non-Control verbs, the causative construction adds an argument; inanimate causees are marked Absolutive and animate causees are marked Dative. The causer is marked with the Ergative:

- (12)       lakā       pyat-O  
           shoes/ABS be.wet-PERF/SET2  
           "(the) shoes got wet."
- (13)       jī:       lakā       pya-k-a  
           1/ERG     shoes/ABS be.wet-CAUS-PST/SET1  
           "I got the shoes wet."

- (14)       ji               pyat-O  
1/ABS       be.wet-PERF/SET2  
"I got wet."
- (15)       ji:            wo-yatO       pya-k-a  
1/ERG       3-DAT       be.wet-CAUS-PST/SET1  
"I got him/her wet."
- (16)       wō:           ji-to        pya-kol-O  
3/ERG       1-DAT       be.wet-CAUS-PERF/SET2  
"S/he got me wet."
- (17)       thwo cithi       libakkO       then-O  
this letter/ABS late       arrive-PERF/SET2  
"The letter arrived late."
- (18)       wō:       cithi       libakkO       thē-kol-O  
3/ERG letter/ABS late       arrive-CAUSE-PERF/SET2  
"S/he caused the letter to arrive late."
- (19)       ji            libakkO       then-O  
1/ABS       late        arrive-PERF/SET2  
"I arrived late."
- (20)       wō:       ji-to       libakkO       thē-kol-O  
3/ERG 1-DAT       late        arrive--CAUS-PERF/SET2  
"S/he caused me to arrive late."
- (21)       ja            but-O  
rice/ABS   be.cooked-PERF/SET2  
"The rice is/has become cooked."
- (22)       wō:           ja            bui-kol-O  
3/ERG       rice/ABS   be.cooked-CAUS-PERF/SET2  
"S/he cooked the rice."

Control intransitive verbs have the same properties in  
causative formation.

- (23)       ji            khwoy-a  
1/ABS       cry-PST/SET1  
"I cried."
- (24)       ji:           wo-yatO       khwoe-k-a  
1/ERG       3-DAT       cry-CAUS-PST/SET1  
"I made him/her cry."
- (25)       wō:           ji-to        khwoe-kol-O  
3/ERG       1-DAT       cry-CAUS-PERF/SET2  
"S/he made me cry."
- (26)       ji            chOkwolō:   din-a  
1/ABS       at once       stop-PST/SET1  
"I stopped at once."



- (27)       ji:           wo-yatO       di-k-a  
           1/ERG        3-DAT       stop-CAUS-PST/SET1  
           "I made him/her stop."
- (28)       wō:           ji-tO        di-kOl-O  
           3/ERG        1-DAT       cry-CAUS-PERF/SET2  
           "S/he made me stop."

Or, the causative form may be derived from a Fluid verb. The intentional/non-intentional distinction is neutralized for the simple stem; the causative suffix carries the same semantic entailments as a Control verb.

- (29)       ji           gwara=tul-a  
           1/ABS        roll-PST/SET1  
           "I intentionally rolled over."
- (30)       ji           gwara=tul-O  
           1/ABS        roll-PERF/SET2  
           "I unintentionally rolled over."
- (31)       ji:           wo-yatO       gwara=tui-k-a  
           1/ERG        3-DAT       roll-CAUS-PST/SET1  
           "I made him/her roll over."
- (32)       wō:           ji-tO        gwara=tui-kOl-O  
           3/ERG        1-DAT       roll-CAUS-PERF/SET2  
           "S/he made me roll over."

Control, Non-Control, and Fluid intransitives become two argument verbs with the addition of the causative suffix; transitive Control and Fluid verbs become three argument verbs with the causative suffix. With transitive Control verbs, the animate causee is marked Dative:

- (33)       ji:           ja           nOy-a  
           1/ERG        rice/ABS   eat-PST/SET1  
           "I ate rice."
- (34)       ji:           wo-yatO       ja    nO-k-a  
           1/ERG        3-DAT       rice eat-CAUS-PST/SET1  
           "I fed him/her rice."
- (35)       wō:           ji-tO        ja    nO-kOl-O  
           3/ERG        1-DAT       rice eat-CAUS-PERF/SET2  
           "S/he fed me rice."

- (36)      ji:    mOca                    buy-a  
           1/ERG child/ABS            carry-PST/SET1  
           "I carried the child."
- (37)      ji:    wo-yatO    mOca            bui-k-a  
           1/ERG 3-DAT            child/ABS    carry-CAUS-PST/SET1  
           "I made him/her carry the child."
- (38)      wō:    ji-tO            mOca            bui-kOl-O  
           3/ERG 1-DAT            child/ABS    carry-CAUS-PERF/SET2  
           "S/he made me carry the child."

In causative constructions, transitive Fluid verbs behave exactly like transitive Control verbs.

- (39)      ji:    ja                    thiy-a  
           1/ERG rice/ABS            touch-PST/SET1  
           "I (intentionally) touched the rice."
- (40)      ji:    ja                    thil-O  
           1/ERG rice/ABS            touch-PERF/SET2  
           "I (unintentionally) touched the rice."
- (41)      ji:    wo-yatO    ja                    thi:-k-a  
           1/ERG 3-DAT            rice/ABS    touch-CAUS-PST/SET1  
           "I made him/her touch the rice."
- (42)      wō:    ji-tO            ja                    thi:-kol-O  
           3/ERG 1-DAT            rice            touch-CAUS-PERF/SET2  
           "S/he made me touch the rice."

#### Affective Causatives

In contrast to the canonical effective causative, there is a set of Non-Control verbs which do not require an additional argument in causative constructions. As a whole, the class will be referred to as "affective" verbs. Semantically, the verbs all refer to various cognitive events (cognition verbs) or sensory/emotional experiences (experiencer verbs).

As the term "affective" causative suggests, they receive middle voice or reflexive-like interpretations. The addition of the causative suffix does not instantiate the canonical distinction between a causer and causee; instead, the causative stem is

interpreted as indicating mental or sensory activity, the active counterpart to the mental or sensory event described by the non-causative stem.

For example, causative interpretations with Dative intransitives are different from other intransitives. In syntactic terms, the causative stem does not require an added argument. Instead, the causative stem can be interpreted as a Control intransitive verb. In semantic terms, the simple Non-Control verb becomes a Control verb with a middle voice interpretation. It suggests that the participant is both the Source and Goal in the event being described.

- (43)        wo-ya(-t0)    cikul-O                    (thē )  
              3-GEN(-DAT) be.cold-PERF/SET2        (like)  
              "(It looks like) S/he's cold."

- (44)        wō:                cikui-k0l-O  
              3/ERG                be.cold-CAUS-PST/SET1  
              "S/he shivered/shook with cold."

Affective causative interpretations are not strictly limited to Dative intransitives. The verb dwOn- 'to err, make a mistake' is a Non-Control intransitive, assigns Absolutive (not Dative) case, and allows an affective causative interpretation. Note also that the causative formation does not even allow for an added causer argument in the clause, although an antecedent cause may be expressed outside the clause. This issue is examined in detail below.

- (45)        ji                dwOn-O  
              1/ABS err-PERF/SET2  
              "I erred."

- (46)        mOca                        dwOn-O  
              child/ABS                err-PERF/SET2  
              "The child erred."

- (47)       ji:    yan-a:       wō:    dwOn-kOl-O  
           1/ERG do-NF       [ 3/ERG err-CAUS-PERF/SET2 ]  
           "Because of my doing, [ he made a mistake ]."
- (48)\*       ji:    wo-yatO     dwOn-k-a  
           1/ERG 3-DAT       err-CAUS-PST/SET1
- (49)       wō:    yan-a:       ji:    dwOn-k-a  
           3/ERG do-NF       [ 1/ERG err-CAUS-PST/SET1 ]  
           "Because of his doing, [ I made a mistake ]."
- (50)\*       wō:    ji-to       dwOn-kOl-O  
           3/ERG 1-DAT       err-CAUS-PERF/SET2

One crucial semantic variable distinguishing effective causatives from affective causatives is the referential identity of the causee. With effective causatives, the canonical interpretation is that the causee is not co-referential with the the causative agent. In contrast, with affective causatives, the interpretation is that the causative agent and the causee are co-referential.

Two argument Non-Control verbs that assign Dative case behave like affective causatives. The causative stem does not require an added argument; instead, like the Dative intransitives above, the causative stem receives a middle-voice and Control verb interpretation.

- (51)       syam-yatO   laxmi       yO:  
           Syam-DAT   Laxmi/ABS be.pleasing/IMPERF/SET2  
           "Syam likes Laxmi."
- (52)       syam-ō:    laxmi       ye:-kOl-O  
           syam/ERG   Laxmi/ABS   be.pleasing-CAUS-PERF/SET2  
           "Syam has come to like Laxmi.", or  
           "Syam has chosen Laxmi."
- (53)       ji-to       laxmi       yO:  
           1-DAT       Laxmi/ABS   be.pleasing/IMPERF/SET2  
           "I like Laxmi."
- (54)       ji:    laxmi       ye:-k-a  
           1/ERG Laxmi/ABS be.pleasing-CAUS-PST/SET1  
           "I've come to like Laxmi.", or  
           "I've chosen Laxmi."

Finally, with Ergative Non-Control (cognition) verbs, the causative stem is interpreted as a Control transitive verb with a middle voice interpretation.

- (55)       ji:   khŏ       lumOn-O  
             1/ERG matter remember-PERF/SET2  
             "I remembered the matter."
- (56)       ji:   khŏ       lumŏ-k-a  
             1/ERG matter remember-CAUS-PST/SET1  
             "I recalled the matter."

The verb lwomOn- 'forget' also forms affective causatives as illustrated in the contrast below between the common prohibitive expression and the common excuse.

- (57)       lwomŏ-k-e               mŏ-te  
             forget-CAUSE-INF NEG-be.obliged  
             "Don't forget!"
- (58)       ka   ji:   lwomOn-O  
             EMPH 1/ERG forget-PERF/SET2  
             "Oh, I forgot!."

Other cognition verbs exhibit the same causative formation:

- (59)       ji:   khŏ       sil-O  
             1/ERG matter know-PERF/SET2  
             "I (just) learned this matter."
- (60)       ji:   khŏ       si:-k-a  
             1/ERG matter know-CAUS-PST/SET1  
             "I discovered this matter."

In conclusion, unlike effective causatives, affective causatives are causative stems which do not add a referentially distinct causee argument. Instead, they form a middle-voice interpretation for predicates of sensory/emotional experience or cognition.

The Argument Structure of Causatives

The canonical effective causative adds an argument, a causal agent, to the event schema. In the effective causative event schema, the causal agent acts with self-initiated force on a referentially distinct patient and thereby the event or action described by the simple non-causative verb stem occurs. Unlike the causative agent, the causee is a participant in the event frame described by the non-causative verb stem. This can be diagrammed in intransitive and transitive clauses as follows:

- (61)        khapa                    cal-O  
              door/ABS                open-PERF/SET2  
              "The door opened."  
  
              [ y OPEN ]
- (62)        wõ:                    khapa            cae-kol-O  
              3/ERG                door/ABS        open-CAUS-PERF/SET2  
              "S/he opened the door."  
  
              [ x [ y OPEN ] CAUSE ]

When the causee is animate, the causative stem assigns Ergative case to source/agent and Dative case to the causee.

- (63)        wõ:                    ज्या            yat-O  
              3/ERG                work/ABS        do-PERF/SET2  
              "He did the work."  
  
              [ y [ z DO ] ]
- (64)        wõ:                    ji-to    ज्या            ya-kol-O  
              3/ERG                1-DAT    work/ABS        do-CAUS-PERF/SET2  
              "He had me do the work."  
  
              [ x [ y [ z DO ] ] CAUSE ]

In contrast, the affective causative does not necessarily require an added argument: the source/agent acts with self-initiated causal force and thereby the event described by the non-causative stem occurs. However, unlike effective

causatives, the source/agent is also a participant in the scope of the event structure described by the non-causative stem.

This can be illustrated for affective verbs as follows:

- (65)           wo               dwOn-O  
          3/ABS           err-PERF/SET2  
          "S/he erred."  
  
          [ x ERR ]
- (66)           wō:    dwOn-kol-O  
          3-ERG err-CAUSE-PERF/SET2  
          "S/he made a mistake."  
  
          [ x<sub>1</sub> [ x<sub>1</sub> ERR ] CAUSE ]
- (67)           wō:    khō       thul-O  
          3/ERG matter understand-PERF/SET2  
          "S/he (just) understood the matter."  
  
          [ x [ y UNDERSTAND ] ]
- (68)           wō:    khō       thui:-kol-O  
          3/ERG matter understand-CAUS-PERF/SET2  
          "S/he figured out the matter."  
  
          [ x<sub>1</sub> [ x<sub>1</sub> [ y UNDERSTAND ] ] CAUSE ]

By including the same participant in both the antecedent cause and the consequent event, affective causatives resemble reflexive constructions, which also include the same participant as causal source and event goal. The canonical reflexive clause in Newari has the reflexive pronoun thO: 'self.'

- (69)           wō:    khica-yatO           dal-O  
          3/ERG dog-DAT           hit-PERF/SET2  
          "He hit the dog."  
  
          [ x   [ y HIT ] ]
- (70)           wō:    thO:-yatO           dal-O  
          3/ERG self-DAT           hit-PERF/SET2  
          "He hit himself."  
  
          [ x<sub>1</sub> [ y<sub>1</sub> HIT ] ]

The simplified event structures for effective and affective causatives, and reflexives are summarized below:

Simple Intransitive	[ x [Vintrans] ]
Simple Transitive	[ x [ y Vtrans ] ]
Reflexive	[ x <sub>1</sub> [ y <sub>1</sub> Vtrans ] ]
Effective Causative	[ x [ y Vintrans ] CAUSE ]
Effective Causative	[ x [ y [ z Vtrans ] ] CAUSE ]
Affective Causative	[ x <sub>1</sub> [ x <sub>1</sub> Vintrans ] CAUSE ]
Affective Causative	[ x <sub>1</sub> [ x <sub>1</sub> [ y Vtrans ] ] CAUSE ]

Although affective causative constructions may be said to have "reflexive-like" event structure, it is important to distinguish the affective causatives as a lexical process from reflexive constructions as a clause level anaphoric process. There are several arguments for not analyzing affective causatives as simply effective causatives with zero anaphor reflexive pronouns.

First, whereas reflexivization is not lexically restricted and may apply to any transitive structure, the affective causative process is lexically restricted. All affective causatives involve experiencer or cognition predicates. In other words, the distinction between effective and affective causatives is a function of the event type as realized in the lexical structure of the verb. In contrast, reflexivization is a fully productive process which applies to any transitive event structure, as long as the referential criteria are met.

In terms of the generative/interpretive semantics literature, affective causatives are "pre-cyclic," reflexives are not (Newmeyer 1976; see also Shibatani 1976 for a review). More to the point, affective causatives arise via a lexical process in which the simple verb stem and the causative suffix combine to



form a causative stem. The syntactic properties and middle voice interpretation for the affective causatives arise as a function of the combinatorial semantics/syntax of the simple verb stem and the causative suffix. In contrast, reflexivization is not a lexical process. The lexical structures of transitive verbs are unspecified for the referential identities of their arguments; reflexivization occurs only when the agent and patient are coreferential.

To understand why affective causatives can not be analyzed as reflexives, consider the transitive Control verb syat(t)- 'kill' and the transitive Non-Control verb lumOn- 'remember.' The verb lumOn- 'remember' is a cognition verb which forms affective causatives. The verb syat(t)- 'kill' is a simple transitive verb which forms effective causatives. In terms of surface morphosyntax, both verbs require two arguments and assign Ergative case. The simple and reflexive clauses for both verbs are given below:

- (71)        wō:    kha                    syat-O  
              3/ERG chicken/ABS        kill-PERF/SET2  
              "He killed the chicken."
- (72)        wō:    thO:-yato    syat-O  
              3/ERG self-DAT        kill-PERF/SET2  
              "S/he killed her/himself."  
              [ x<sub>1</sub> [ y<sub>1</sub> KILL ] ]
- (73)        wō:    khō        lumOn-O  
              3/ERG matter remember-PERF/SET2  
              "S/he remembered the matter."
- (74)        wō:    thO:-yato        lumOn-O  
              3/ERG self-DAT        remember-PERF/SET2  
              "S/he remembered her/himself."  
              [ x<sub>1</sub> [ y<sub>1</sub> REMEMBER ] ]

There is an argument that the affective causative is a reflexive in the following sense: the middle voice interpretation is simply the result of anaphoric deletion of the reflexive morpheme. The structure can be paraphrased as: 'cause self to remember.' Recall the interpretation of volition by Talmy (1985) discussed in Chapter IV, where he suggested volition is metaphorically represented in sentences such as: "I dragged myself out of bed."

In the two causatives given below, example (76) is the hypothetical reflexive structure for the affective causative stem lumŌ-kol-O 'recalled.'

- (75)        wŌ:    ji-tŌ        kha            sya-kol-O  
              3/ERG 1-DAT        chicken        kill-CAUSE-PERF/SET2  
              "S/he got me to kill the chicken."

[ x [ y [ z KILL ] ] CAUSE ]

- (76)        wŌ:    ( Ø )        khŌ        lumŌ-kol-O  
              3/ERG (self)        matter        remember-PERF/SET2  
              "S/he got herself to remember the matter."

[ x<sub>1</sub> [ self<sub>1</sub> [ z REMEMBER ] ] CAUSE ]

However, this interpretation does not accord with the intuitions of the speakers I consulted. For example, the actual overt presence of the reflexive pronoun thŌ: 'self' does not lead to an interpretation in which the self is viewed as the causee. In other words, the overt reflexive form is not synonymous with the reading: 'cause self to remember.'

Instead, there is a possible benefactive reading: 'recalled for his/her own benefit.' The benefactive interpretation is typically expressed with a benefactive form using the borrowed Nepali form laqi 'benefit.'

- (77)        wō:    thO-gu-lagī        lumō-kol-O  
              3/ERG self-GEN-benefit remember-CAUSE-PERF/SET2  
              "He recalled (it) for his own benefit."

Also, the Dative form of the reflexive leads to an interpretation something to the effect: 'recall self.' For example: "He recalls/thinks of himself when people owe him money (but conveniently forgets when he owes them money)."

- (78)        wō:    thO:-yatO tū        lumō-kol-O  
              3/ERG self-DAT EMPH remember-CAUSE-PERF/SET2  
              "He recalls himself."

In any event, the overt reflexive pronoun does not lead to the interpretation of self as causee, as in the diagram for (76) above. Instead, the overt reflexive structure is interpreted as follows:

[ x<sub>1</sub> [ [ self<sub>1</sub> REMEMBER ] ] CAUSE ]

There are several other arguments which show that the affective causative cannot be analyzed as a simple reflexive. With an Ergative transitive Control verb such as sva(t)- 'kill', the Ergative (agent) argument in the simple clause becomes the Dative (causee) in the causative structure; the causative agent is marked Ergative. In contrast, the lexical structure of lumOn- 'remember' and other affective verbs has the causative agent role appear without increasing valency and creating a Dative marked causee. This raises questions about the lexical structure of the simple non-causative stem.

The fact that these verbs assign Ergative case but are Non-Control verbs already makes them suspicious in this regard. As noted in Chapter V, the Ergative marking assigned to cognition verbs in simple clauses is not associated with a canonical source/agent position, which would normally align with

self-initiated force. In these simple clauses, Ergative case assignment is problematically associated with an argument that can not co-occur with self-initiated force.

The distribution of auxiliary verbs with affective causatives suggests that affective causatives arise via unaccusative lexical structures. For example, recall that with single argument Dative verbs, the affective causative does not appear to add an extra argument position to the surface morphosyntax.

- (79)            syam-ya(-tO)        cikul-O                            (khOnisa)  
                  Syam-GEN(-DAT)   be.cold-PERF/SET2        (it.appears)  
                  "(It appears that) Syam got cold."
- (80)            syam-Ō:        cikui-kOl-O  
                  Syam-ERG    be.cold-CAUS-PERF/SET2  
                  "Syam shivered."

In fact, the causative stem automatically fills the agent role without creating a causee argument. In order to introduce a distinct causee argument, it is necessary to add the verb bi(1)- 'give' in a verb-auxiliary construction (see Chapter II):

- (81)            syam-Ō:        ji-tO    cikui-k-a                            bil-O  
                  Syam-ERG    1-DAT   be.cold-CAUS-CM            give-PERF/SET2  
                  "Syam caused me to get cold."

Moreover, without the verb-auxiliary construction and the verb bi(1)- 'give', the causative stem behaves like an intransitive Control verb which cannot take a second argument. It behaves as if its argument structure is saturated. In the causative process, the simple verb stem accepts a causal agent argument, but does not accept a causee argument:<sup>2</sup>

- (82)\*            syam-Ō:        ji-tO                            cikui-kOl-O  
                  Syam-ERG    1-DAT                            be.cold-CAUS-PERF/SET2

Cognition verbs typically exhibit the same type of morphosyntactic behavior. The addition of a causee argument is not

acceptable without the presence of the verb bi(1)- 'give' in a verb-auxiliary construction:

- (83)\*       ji:   wo-yatO lumŃ-k-a  
               1/ERG 3-DAT   remember-CAUS-PST/SET1  
               "I got him/her to remember (it)."<sup>3</sup>
- (84)       ji:   wo-yatO lumŃ-k-a               biy-a  
               1/ERG 3-DAT   remember-CAUS-CM   give-PST/SET1  
               "I got him/her to remember (it)."

The causative stem with Control transitives such as sya(t)- 'kill' automatically adds a causee argument without requiring the verb-auxiliary construction.

- (85)       ji:   wo-yatO   kha               sya-k-a  
               1/ERG 3-DAT   chicken       kill-CAUSE-PST/SET1  
               "I got him to kill the chicken."

The morphosyntactic behavior of cognition and experiencer verbs in affective causatives suggests a schematic structure for the simple stem which contains an unfilled argument position which may be filled by the causative agent. Once this argument position is filled, however, the lexical structure is saturated; hence, the auxiliary form with bi(1)- 'give' must be used to add a new argument position. In fact, the causative source/agent must fill the position within the simple event structure; no new arguments are introduced.

The conclusion, then, is that affective causatives are not simple reflexive constructions; they are "reflexive" only in the sense that they involve actions in which the participant is both the Source and Goal of the sensory/emotion or cognitive event described by the causative stem. The affective causative construction, however, is a function of the event schema and the lexical representations. It is not reflexive in the sense of a

clausal structure productively co-indexing coreferential arguments.

The distinction between effective and affective causatives results from the combination of the lexical structure of the causative morpheme -k-/-kOl- with two distinct lexical structures associated with the simple verb stems. At issue, then, is how to characterize the lexical structures of cognition and experiencer verbs which admit affective causatives and distinguish them from those verbs that form effective causatives. The evidence suggests that verbs that form affective causatives lack an argument position in lexical structure which may be filled by the morphologically marked causative agent role.

#### The Semantic Basis for Affective Causative Structure

In contrast to the other verb types, experiencer and cognition verbs allow affective causative constructions. However, despite their similar behavior in causatives, there is a distinction between Dative and Ergative case assigning predicates. That is, within the class of affective verbs, case assignment functions to mark the distinctive semantic properties of cognition and experiencer predicates. Ergative marking tends to occur with cognitive events such as 'understand', 'know', and 'remember.' Dative marking tends to occur with sensory/emotive experiences such as 'be.hungry', 'be.cold', 'be.hurt', or 'be.pleasing to.' This is problematic.

Consider first the Dative verbs. The affective causative construction can be accounted for if the Goal argument position

is, in fact, an internal argument position in an unaccusative lexical structure that contains an unfilled external (subject) argument position (cf. Belletti & Rizzi 1988; Davies 1986; Grimshaw 1990; Perlmutter 1978; 1982).

The affective causative formation follows directly if the predicates which allow the affective causative construction are viewed as having unaccusative lexical structures. This would account for their behavior in causative formation, where the causative agent fills the unfilled argument slot and the verb is interpreted as an affective causative. However, a non-arbitrary account must link the argument structure with a conceptual schema for unaccusative grammaticalization (DeLancey 1985a; Klaiman 1981).

As noted in Chapter V, in a canonical ditransitive clause, the source/agent transfers a trajector/theme to the goal/recipient. The canonical case marking function assigns Ergative case to the source/agent, Absolutive to the trajector/theme, and Dative to the goal/recipient. The causal source/agent role fills the canonical subject (external) argument position; the theme and recipient fill the direct and indirect object (internal) roles in argument structure. The schematic and lexical representations are given below:

bi(1)- 'give'

#### SCHEMATIC REPRESENTATION

Source-----Trajector----->Goal  
(x) Agent-----(y) Theme----->(z) Recipient

#### LEXICAL STRUCTURE

[ x [ [ z To ] y Move ] Cause ]  
[ x [ [ z ] y bi- ] ]

CASE (x)ERG (z)DAT (y)ABS bi(l)-

The experiencer schema does not represent externalized, perceptually salient causal or directional dynamics. Experience is the endpoint of some unspecified process. The event schema does not include a causal source within its frame.

ye(l)- 'be.pleasing to'

SCHEMATIC REPRESENTATION

```
( )-----Trajector----->Goal
( )-----Theme----->Experiencer
```

LEXICAL STRUCTURE

```
[ ( ) [ [ z To ] y Be.pleasing ] ]
[ ( ) [ [ z ] y ye- ] ]
```

CASE (z)DAT (y)ABS ye(l)-

When this lexical structure is combined with the causative suffix to create a causative stem, the resultant structure takes the form of an affective causative, or middle-voice:

ye-k- 'be.pleasing to - CAUS'

SCHEMATIC REPRESENTATION

```
Source1---[--Trajector--->Goal1 ]
Agent1---[--Theme----->Experiencer1 ]
```

LEXICAL STRUCTURE

```
[x1 [ [ ( )1 To ] z Be.pleasing ] Cause ]
[x1 [ [ ( )1 ] z ye ] -k- ]
```

CASE (x)ERG (z)ABS ye-k-

Single argument Dative verbs are similar, lacking only the trajector. The experiencer is the endpoint of a change whose causal origins are outside the event frame.

ciku(l)- 'be.cold'



## SCHEMATIC REPRESENTATION

```
( )----->Goal
( )----->Experiencer
```

## LEXICAL STRUCTURE

```
[ ( ) [ [ y To ] Be.cold ] ]
[ ( ) [ [ y      ] ciku- ] ]
```

CASE (y)DAT ciku(l)-

The causative formation and affective interpretation follows directly from the lexical structure.

cikui-k- 'be.cold - CAUS'

## SCHEMATIC REPRESENTATION

```
Sourcei--[----->Goali ]
Agenti--[----->Experienceri ]
```

## LEXICAL STRUCTURE

```
[ xi [ [ ( )i To ] Be.cold ] Cause ]
[ xi [ [ ( )i      ] ciku ] -k- ]
```

CASE (x)ERG cikui-k-

The lexical structure of cognition verbs is more problematic. Whereas experiencer arguments can readily be identified as Goal on the basis of both the behavior in affective causatives and the Goal/Dative case marking, cognition verbs assign Ergative case in simple clauses and are thus problematic. Although the behavior in affective causatives suggests an unfilled agent argument role, the Ergative case makes it problematic to claim that the argument role is aligned with Goal.

The paradox is the following: The structure preservation principle motivates treating the transitive, Ergative subject of simple cognition verbs as an agent/source, not as an experiencer/goal. However, the fact that cognition verbs form

affective causatives like experiencer verbs motivates treating the argument role the same way, as a goal/experiencer. From a descriptive point of view, the issue is straightforward: The lexical property which is functionally relevant for causative formation is distinct from case assignment. The evidence from causatives shows that the agent argument position is unrealized in lexical structure. At the same time, case assignment indicates source marking, suggesting that with the non-causative stem, the Ergative marked argument must be a non-agent source (cf. DeLancey 1985a).

The entire class of affective predicates is distinguished by a schematic representation which grammaticalizes an unfilled source/external argument position. However, within the class of affective verbs, cognition and experiencer predicates are contrastive with respect to the source/goal schema of internal experience. In simple clauses, experiencer predicates construe the internal event as arrival at an endpoint; in contrast, cognition is construed proceeding from a source. The case marking facts suggest that the schema for the affective verb class has its own internal structure, distinguishing source and goal.

A syntactic account would have the cognizer argument "promoted/moved" to a "subject/external" position before it receives the Ergative case. The insight behind this approach is that it allows for the generalization that Ergative case is automatically assigned to the external (subject) argument in any transitive clause. This strategy is characteristic of both relational grammar and government-binding accounts of unac-

cusativity (cf. Belletti & Rizzi 1988; Perlmutter 1983; Perlmutter & Rosen 1984).

Since the data at hand can not resolve this issue, I will not pursue the details here except to note that any synchronic approach must account for how cognition verbs with two arguments receive Ergative case and experiencer verbs with two arguments receive Dative case marking. At the same time, it must account for how it is that both cognition and experiencer verbs form affective causatives, to the exclusion of other two argument verbs. The main point is that, on the one hand, affective verbs as a class have unfilled argument structures distinct from other verbs. On the other hand, the affective verbs are themselves sub-typed by the two different case assigning properties.

The intuition that "cognition" is more active than "experience," but neither one is active with respect to canonical transitive agency suggests a semantic account. We also want to keep the semantic intuition that cognition verbs are Non-Control verbs because they are incompatible with self-initiated force.

Typologically, cognition and mental state verbs are problematic boundary cases for case marking and grammatical relations (cf. Croft 1991; Grimshaw 1990). It is not surprising that the class is problematic. Thus, rather than motivate an explanation which would be, in any event, severely underdetermined by the data, the schematic and lexical representations can be given relative to the specific morphosyntactic mappings which occur. That is, with the grammatical process of case assignment in simple clauses, the cognizer is a Source in a transitive

structure, although it is not aligned with self-initiated force. In contrast, when the grammatical process is causative formation, the cognizer is a goal argument in an unaccusative lexical structure which forms affective causatives.

lumOn- 'remember'

#### SCHEMATIC REPRESENTATION

Cognizer = x

Concept = y

#### Case Assignment in Simple Clauses

(x)Source--->(y)Trajector/Goal

[ x [ y Remember ] ]

(x)ERG (y)ABS lumOn-

#### Affective Causative Construction

( )---(y)Trajector--->(x)Goal

[ ( ) [ [ x ] y Remember ] ]  
[ x<sub>i</sub> [ [ ( )<sub>i</sub> ] y Remember ] ] Cause ]

(x)ERG (y)ABS lumOn-k-

Approaching the problem this way predicts that non-uniform mappings are likely to produce variation among speakers and lexical items. This is indeed true.

For example, a couple of speakers have suggested to me that the causative form with the verb thu(1)- 'realize, understand' (thui-k-a) is ambiguous. They have suggested that the contrast between an affective interpretation, e.g., 'figure out' and an effective causative interpretation, e.g., 'cause him/her to understand' is not expressed by an affective causative formation, but is best expressed via the contrast below with the auxiliary-verb construction.

- (86) wõ: thui-kol-O  
 3/ERG understand-CAUS-PERF/SET2  
 (a) "S/he figured (it) out",  
 (b)? "S/he got (someone) to understand (it)"
- (87) wõ: thui-k-a kol-O  
 3/ERG understand-CAUS-CM take-PERF/SET2  
 "S/he figured (it) out."
- (88) wõ: wo-yatO thui-k-a bil-O  
 3/ERG 3-DAT understand-CAUS-CM give-PERF/SET2  
 "S/he explained (it) to him."

All of the speakers whom I've consulted agreed that the verb-auxiliary forms were acceptable and unambiguous. Moreover, all seemed to accept the affective interpretation with thui-kol-O, as in (86a) above. However, only a few speakers accepted an effective causative interpretation with thui-kol-O, as in (86b).

There is some variation with other verbs. For example, Hale and Manandhar (1980:82) include the causative form of si(1)- 'know', si:-k-, as an effective causative: 'cause someone else to know.' Some speakers whom I've consulted did not find si:-k- an acceptable form for an effective causative; others found it acceptable. All of the speakers I consulted had no problem accepting si:-k- as an affective causative: 'discover.'

This type of variation should not be surprising and does not affect the basic argument. The primary contrast is between verbs which automatically form effective causatives and verbs which admit affective causatives. The variable interpretations suggest incipient reanalysis of the underlying lexical structures on the basis of the surface morphosyntax. That is, when speakers allow cognition, Ergative Non-Control verbs to form effective causatives, it suggests that the verbs are becoming

reanalyzed as more canonical Ergative agentive, transitive verbs. To my knowledge, there is no evidence that Ergative cognition verbs are being reanalyzed as Control verbs, which would allow them to take SET1 inflection; hence, their unique status is still transparent.

Distinguishing Fluid Verbs  
from Affective Verbs

There is an important functional similarity between the Fluid verb alternation and the affective causative alternation. In both cases, there is a morphological contrast distinguishing an intentional self-initiated action from a non-intentional, non-initiated event. Consider the semantic alternations below with the Fluid verb gwara tul- 'roll over' and the Non-Control verb dwOn- 'err.' The simple forms with SET2 inflection indicate non-initiated events undergone by the individual.

- (89)           ji               gwara=tul-O  
          1/ABS           roll-PERF/SET2  
          "I rolled over (non-initiated)."
- (90)           ji               dwOn-O  
          1/ABS           err-PERF/SET2  
          "I erred (non-initiated)."

In contrast, the SET1 form of the Fluid verb and the causative stem of the experiencer verb both indicate a self-initiated action.

- (91)           ji               gwara=tul-a  
          1/ABS           roll-PST/SET1  
          "I rolled over (self-initiated)."
- (92)           jr:            dwÖ-k-a  
          1/ERG           err-CAUSE-PST/SET1  
          "I made a mistake (self-initiated)."

The functional and conceptual similarity suggests some kind of deeper affinity. Both Fluid verbs and affective verbs involve events which can be described from two perspectives: self-initiated and non-initiated. However, the differences between SET1/SET2 inflection and the causative morpheme -k-/-kOl- suggest other important differences. For example, the lexical structure of the Fluid verb does not appear to have an unfilled causal source. Unlike dwOn- 'err', the Fluid verb gwara=tul- 'roll over' forms an effective causative. The affective interpretation is impossible.

(93)           ji:           wo-yatO      gwara=tui-k-a  
               1/ERG        3-DAT        roll-CAUS-PST/SET1  
               "I rolled him/her over."

(94)\*           ji:           gwara=tui-k-a  
               1/ERG        roll-CAUS-PST/SET1  
               "I rolled over (self-initiated)."

Thus, one important difference between Fluid verbs and affective verbs is in their argument structures. Because the lexical structure of affective verbs has an unfilled argument position, the causative stem forms an affective causative. In contrast, Fluid verbs always form effective causatives. As Chapters IV and V showed, self-initiated force is a semantic feature conflated with the verbs semantics, but does not interact with argument structures. In contrast, in order to derive a self-initiated action from a simple affective verb, the causative stem must add a causal agent argument role.

There is a second important distinction. The Fluid SET1 interpretations are subject to evidential and discourse role constraints; in contrast, the formation of the affective causative stem is not subject to these constraints.<sup>4</sup> For example,

the Fluid interpretations and SET1/SET2 distributions with the verb thi(1)- 'touch' are subject to evidential discourse role constraints. The formation of affective causatives with the verb si(1)- 'understand' are not.

- (95)       ji:   ja                   thil-O  
           1/ERG rice/ABS           touch-PERF/SET2  
           "I touched the rice (non-initiated)."
- (96)       ji:           khŏ   sil-O  
           1/ERG       matter know-PERF/SET2  
           "I (just) learned this matter (non-initiated)."
- (97)       ji:   ja                   thiy-a  
           1/ERG rice/ABS           touch-PST/SET1  
           "I touched the rice (self-initiated)."
- (98)       ji:   khŏ   si:-k-a  
           1/ERG matter know-CAUS-PST/SET1  
           "I discovered this matter (self-initiated)."
- (99)       wŏ:   ja                   thil-O  
           3/ERG rice/ABS           touch-PERF/SET2  
           "S/he touched the rice."
- (100)      wŏ:   khŏ   sil-O  
           3/ERG matter know-PERF/SET2  
           "S/he (just) learned this matter."
- (101)\*     wŏ:   ja                   thiy-a  
           3/ERG rice/ABS           touch-PST/SET1
- (102)      wŏ:   khŏ   si:-kol-O  
           3/ERG matter know-CAUS-PERF/SET2  
           "S/he discovered this matter (self-initiated)."

In conclusion, both the Fluid alternation and the affective causative alternation manifest a distinction between self-initiated and non-initiated events. However, the two constructions manifest the distinction in different morphosyntactic systems.



Notes

<sup>1</sup>The terms "Effective" and "Affective" are discussed in Klaiman (1988). Another term is "deponent middle-voice."

<sup>2</sup>The structure does admit the rather implausible reading: "Syam shivered for me."

<sup>3</sup>This sentence does admit the interpretation "I recalled him," but not "I got him to remember."

<sup>4</sup>This is not entirely true as we shall see in Chapter VII. However, the exceptions do not invalidate the generalization that SET1/SET2 inflection with Fluid verbs is obligatorily constrained by discourse evidential principles; affective causatives are not.

## CHAPTER VII

## ASPECT/MODALITY VERBS

Chapters III and IV argued that the conceptual structure of intentional action has two domains: (a) self-initiated force, (b) in accordance with a mental representation. They have distinct realizations in Newari grammar: (a) the concept of self-initiated force is incorporated in lexical structure and accounts for the three classes of verbs, and (b) the attribution of a mental representation to an individual is expressed via inflection, where inflection indexes a self-initiated behavior in accordance with a representation only under the appropriate evidential conditions in discourse.

Chapter V showed that this concept of intentional action is realized independently of thematic roles and case. More specifically, the lexical property of self-initiated force was independent of the parameters of a Source>Trajector>Goal schema which determined case assignment. Instead, the Source>Trajector>Goal schema was mapped onto argument structures resulting in Ergative/Absolutive/Dative case assignments.

Chapter VI showed that there are two types of verbs which admit alternate interpretations between self-initiated and non-initiated events: Fluid type and affective causative type. Despite this apparent semantic similarity, the Fluid alternation and affective causative alternation are functionally and structurally independent of one another. The distinction between

self-initiated and non-initiated events which is functionally relevant for the three verb classes is not the same lexical property which distinguishes effective and affective causative verbs. The distinction between effective and affective causative verbs is a function of unaccusative lexical structures, i.e., grammaticalized event frames with an unfilled causal source argument position. In contrast, the distinction among Control, Non-Control, and Fluid verbs is a function of the incorporated lexical feature: self-initiated force.

Apparently, the mapping of intentional action onto grammatical structure does not interact with other core mapping domains: specifically, thematic roles, argument structure, and case. What, then, is the status of the concept 'intentional action'? Is the functional domain confined to the inflectional paradigm? If not, what is its status in mapping between conceptual structure and grammatical organization? This Chapter addresses these questions.

This chapter shows that the conceptual structure and discourse principles which account for SET1/SET2 asymmetries can account for other distributions outside of the SET1/SET2 inflectional contrast. This supports the argument that the functional domain of the notion 'intentional action' is not confined to inflection and hence exists as an autonomous conceptual structure/discourse function. While properties of the conceptual structure are mapped into the grammar via lexical conflation and the SET1/SET2 opposition, the conceptual structure also underlies other function/form alternations.

The evidence comes from the distribution of three aspect/modality verbs taking infinitive complements: ten- 'get ready/be ready,' te(1)- 'time to/obliged to,' and dhun 'finish/be.finished.' Each of the verbs has a different set of semantic, subcategorizing, and inflectional properties. Yet, in their different properties, each exhibits the exact same functional distribution as the SET1/SET2 opposition, even though it is not the inflectional contrast itself which expresses the contrast.

The evidence shows that the conceptual structure underlying intentional action is manifested in these domains independent of inflection. In other words, the conceptual structures and discourse functions which underlie the inflectional system govern distributions outside of the inflectional system. Thus, the notion of 'intentional action' in Newari has:

1. A formal realization in SET1/SET2 inflection independent of thematic roles, argument structure, and case.
2. A functional realization in domains other than inflection.

In short, the functional domain of the concept "intentional action" can neither be subsumed within the mappings of thematic roles and argument structures nor reduced to a merely morphological, i.e., inflectional domain.

#### Modal/Aspectual Verbs

Temporal dynamics in simple clauses are a function of the inherent aspect of the verb and the tense/aspect value of the inflectional suffix. In addition to the inflection marking,

there are several infinitive complement constructions in which aspect/modality verbs modify properties of the simple clause. Each of the aspect/modality verbs interacts with the inflection system in different ways.

As noted in Chapter II infinitive complements are marked with the invariant form VERB-e.<sup>1</sup> The arguments for and against different syntactic accounts of infinitive complements in Newari are complicated and beyond the scope of this study (cf. Givón 1985). Examples with all three infinitive complements verbs are given below.

- |     |                                   |      |      |        |                   |
|-----|-----------------------------------|------|------|--------|-------------------|
| (1) | ji                                | /ji: | jya  | ya-e   | ten-a             |
|     | lABS                              | /ERG | work | do-INF | ready-PAST/SET1   |
|     | "I get/am getting ready to work." |      |      |        |                   |
|     |                                   |      |      |        |                   |
| (2) | ji                                | /ji: | jya  | ya-e   | tel-O             |
|     | lABS                              | /ERG | work | do-INF | time.to-PERF/SET2 |
|     | "It's time for me to work."       |      |      |        |                   |
|     |                                   |      |      |        |                   |
| (3) | ji                                | /ji: | jya  | ya-e   | dhun-O            |
|     | lABS                              | /ERG | work | do-INF | finish-PERF/SET2  |
|     | "I'm already finished working."   |      |      |        |                   |

Case marking with transitive complements shows that the "subject" nominal does not have to receive case from the complement verb. Thus, the Ergative case marking, normally obligatory in simple transitive clauses, marks a pragmatically marked agent focus in complement constructions. Although nothing crucial hinges on the assumption, for expository purposes, I will assume: (a) the Absolutive form is the default form, and (b) the corresponding clausal embeddings:

- ten- 'get ready/be ready'      [ NP<sub>1</sub> [ e<sub>1</sub> [ VP-INF ] ] ten ]
- te(l)- 'time to/obliged to'      [ NP<sub>1</sub> [ e<sub>1</sub> [ VP-INF ] ] te ]
- dhun- 'finish/be.finished'      [ NP<sub>1</sub> [ e<sub>1</sub> [ VP-INF ] ] dhun ]

ten- 'get ready/be ready'

With ten- 'get ready/be ready,' the infinitive complements may be Control, Non-Control, or Fluid verbs. Inflection appears on the main verb and is a function of: (a) the type of complement verb, (b) epistemic source, (c) a Fluid interpretation of the verb ten-. For example, SET1 occurs with Control verb complements under the appropriate discourse conditions.

- (4)           ji           won-e           ten-a-gu  
           1/ABS       go-INF       ready-PST/SET1-NOM  
           "I am getting ready to go..."<sup>2</sup>
- (5)           gOnO           won-e           ten-a-gu  
           where       go-INF       ready-PST/SET1-NOM  
           "Where are (you) getting ready to go..."

With Control verb complements, SET2 inflection occurs in all other environments which lack the appropriate discourse conditions.

- (6)           ji       won-e       ten-a-bO1Oe  
           1/ABS go-INF       ready-PST/SET1-time  
           "As I was getting ready to go..."
- (7)           chO       won-e       tyŃ:-bO1Oe  
           2/ABS go-INF       ready/IMPERF/SET2-time  
           "As you were getting ready to go..."
- (8)           wo       won-e       tyŃ:-bO1Oe  
           3/ABS go-INF       ready/IMPERF/SET2-time  
           "As s/he was getting ready to go..."

SET2 inflection will always occur with Non-Control complement verbs.

- (9)           ji           then-e           tyŃ:-bO1Oe  
           1/ABS       arrive-INF       ready/IMPERF/SET2-time  
           "As I was about to arrive..."
- (10)\*       ji       then-e       ten-a-bO1Oe  
           1/ABS arrive-INF       ready-PST/SET1-time

In addition to the above distributions, with Control verb complements, ten- has Fluid properties. For example, with

first person declarative clauses and a Control verb complement, a SET2 form is possible with evidential qualifiers. The contrast in the two examples below is roughly paraphrasable as "get ready" vs. "be ready." These examples illustrate that the verb ten- meets the distributional criteria for a Fluid verb.

- (11)       ji      bwō           wone-e      ten-a-bōlōe  
           1/ABS study/PURP go-INF      ready-PST/SET1-time  
           "As I got ready to go study..."
- (12)       ji      bwō           wone-e      tyō:-bōlōe  
           1/ABS study/PURP go-INF      ready-IMPERF/SET2-time  
           "When I was ready to go study..."

In summary, ten- takes infinitive complements and manifests the SET1/SET2 opposition with a Fluid distribution. In this sense, ten- has the lexical structure of a Fluid verb, in addition to its complement subcategorization. SET1 occurs whenever: (a) the complement verb is a Control verb, (b) the Fluid interpretation of ten- includes self-initiated force, (c) the self-initiated action is in accordance with a representation, (d) the discourse role of epistemic source is coreferential with the actor. The co-occurrence of the parameters can be schematized as follows:

{ES<sub>1</sub>} [ x<sub>1</sub> REP [ x<sub>1</sub> [ x<sub>1</sub>      INITIATE+VERB ] (INITIATE)ten ] ]

Since each one of these parameters varies independently, SET2 will occur whenever any one of the parameters is absent. For example, when the complement verb is a Control verb but the Fluid interpretation of ten- does not include self-initiated force, SET2 occurs. By implication, in these cases, there can be no attribution of force in accordance with a representation; the interpretation is paraphrased as "be ready to":

{ES<sub>1</sub>} [ x<sub>2</sub> REP [ x<sub>1</sub> [ x<sub>1</sub>      INITIATE+VERB ] (      )ten ] ]

SET2 inflection occurs with Control verb complements whenever the Epistemic Source {ES} and the actor are not coreferential. The Fluid interpretation of ten- is neutralized:

{ES<sub>j</sub>} [ x<sub>1</sub> REP [ x<sub>1</sub> [ x<sub>1</sub> INITIATE+VERB ] (INITIATE)ten ] ]

When the complement verb is a Non-Control verb, there can be no coindexing between self-initiated force and the representation; hence, only SET2 is possible. By implication, the Fluid interpretation of ten- is limited to the non-initiated event interpretation:

{ES<sub>1</sub>} [ x<sub>j</sub> REP [ x<sub>1</sub> [ x<sub>1</sub> VERB ] ( )ten ] ]

te(l)- 'time to/obliged to'

In addition to ten- 'get ready/be ready,' there is another aspect/modality verb, te(l)- 'time to/obliged to,' which also takes infinite complements. However, unlike ten-, the verb te(l)- 'time to/obliged to' is a Non-Control verb allowing only SET2 inflection. The contrast between the two is illustrated below.<sup>3</sup>

(13)           ji               won-e           ten-a  
          1/ABS           go-INF           ready-PST/SET1  
          "I'm ready/about to go."

(14)           ji               won-e           tel-O  
          1/ABS           go-INF           time.to-PERF/SET2  
          "It's time for me to go."

Although te(l)- is a Non-Control verb, it only takes Control verbs as complements. Recall that then- 'to arrive' and bu(t)- 'to lose (in a contest)' are both Non-Control verbs.

(15)\*           ji               then-e           tel-O  
          1/ABS           arrive-INF           time.to-PERF/SET2

(16)\*           ji               bu-e           tel-O  
          1/ABS           lose-INF           time.to-PERF/SET2



Because it is a Non-Control verb, te(l)- allows only SET2 inflection. However, there are distributional restrictions on te(l)- which parallel the SET1/SET2 contrast with ten- and other Control verbs.

For example, whenever speakers use te(l)- in environments that would otherwise take SET1 inflection, the verb is given an epistemic reading. That is, the first person declarative interpretation is roughly paraphrased in English as: 'I'd better' or 'It's time to.' The speaker is reporting that the time has arrived for him/her to initiate a plan or fulfill some prior obligation to act. In invoking some unspecified responsibility, it is often used to politely indicate the need to leave. To the extent that the judgement about the appropriate time to initiate an action or fulfill a particular obligation is a mental event unique to individual mental states, I will use the term epistemic to characterize this interpretation of the verb.

In contrast, in SET2 environments with Control verb complements, the verb te(l)- is given a deontic interpretation. For example, the first person interrogative interpretation is roughly paraphrased in English as: 'Is it time for me to.' The speaker is inquiring whether the time has arrived for him/her to fulfill an obligation to act. In this case, the speaker attributes to the addressee the authority to judge the appropriate time for the speaker to fulfill a particular, presupposed obligation. In this sense, I will use the term deontic to characterize the interpretation.

Similar asymmetrical modality interpretations are apparent in the prescriptive tradition with will and shall in English

(Boyd and Boyd 1980). Other examples include the English modal may. The first person declarative clause is strongly biased towards an epistemic interpretation as: 'self-determined possibility.' The judgement is attributed to the Epistemic Source, who is coreferential with the actor.

(17) I may play the guitar tonight.

In contrast, the first person interrogative interpretation is strongly biased towards a deontic interpretation as: 'permission to play.' The judgement of possibility is attributed to the Epistemic source, the addressee, who is not coreferential with the actor.

(18) May I play the guitar tonight.

This English alternation is functionally analagous to the contrast with te(1)- in Newari, suggesting that the conceptual structures and functional principles underlying the Newari SET1/SET2 inflection are not mere ad hoc explanations, but involve more fundamental conceptual and discourse principles.

The epistemic sense of te(1)- is judged unacceptable whenever the complement verb is a Control verb and the actor/subject is not the epistemic source. In these contexts, the use of the verb te(1)- is acceptable only with a deontic interpretation: 'obliged to.' In other words, the judgement is not attributed to the participant referred to in the clause. Instead, it indexes a judgement external to the clausal actor/subject.

For example, speakers accept the epistemic sense of te(1)- in first person declarative clauses with a Control verb, but find it unfelicitous in second and third person clauses.

- (19)       ji           won-e       tel-O  
           1/ABS       go-INF      time.to-PERF/SET2  
           "It's time for me to go." (epistemic)
- (20)       chO           won-e       tel-O  
           2/ABS       go-INF      time.to-PERF/SET2  
           "Its time that you go!" (? or deontic sense only)
- (21)       wo           won-e       tel-O  
           3/ABS       go-INF      time.to-PERF/SET2  
           "Its time that s/he go!" (? or deontic sense only)

Although the deontic sense in second and third persons is acceptable to most speakers I consulted, several speakers found the deontic interpretations odd and suggested that the verb te(l)- was anomalous outside epistemic contexts. In my own observations in conversational interaction, the epistemic usages occurred almost exclusively. Whether the deontic interpretation was accepted or not, all speakers drew a clear distinction between the acceptable epistemic contexts (parallel with SET1 contexts) and the default contexts (parallel with SET2 contexts).

In interrogative clauses, only second person actor/subjects are acceptable with the epistemic sense of the verb te(l)-. Again, the deontic sense for non-second persons is acceptable to some speakers.

- (22)       ji           won-e       tel-O                   la  
           1/ABS       go-INF      time.to-PERF/SET2       Q  
           "Is it time for me to go?" (? deontic sense only)
- (23)       chO           won-e       tel-O                   la  
           2/ABS       go-INF      time.to-PERF/SET2       Q  
           "Is it time for you to go?" (epistemic sense)
- (24)       wo           won-e       tel-O                   la  
           3/ABS       go-INF      time.to-PERF/SET2       Q  
           "Is it time that s/he go?" (? deontic sense only)

Finally, logophoric contexts with the reported speech particle hŏ create epistemic interpretations.

- (25)           wo               won-e           tel-O                   hō  
               3/ABS           go-INF           time.to-PERF/SET2       EVD  
               "He<sub>i</sub> said it's time for him<sub>i</sub> to go" (epistemic)

Two factors account for the distribution and interpretation of the verb te(1)-:

First, although the verb itself is a Non-Control verb, it subcategorizes for Control verbs only. The actions must be potentially those that are self-initiated according to a plan.

Second, the alternative epistemic vs. deontic interpretations are a function of the same discourse role/evidential principles which underlie the SET1/SET2 opposition.

Consider first the subcategorization principles for te(1)-. The subcategorization for Control verbs is not unique to the verb te(1)-; there is a small set of complement taking verbs which subcategorize for Control verbs complements only. For example, the verb swo(1)- 'watch, look' functions as a modality verb meaning 'try to.' As a complement taking verb, it subcategorizes for Control verbs only. The infinitive complement may optionally take Dative marking.

- (26)           wō:               pyakhō                   swol-O  
               3/ERG           theatre               look-PERF/SET2  
               "S/he watched the play."
- (27)           wō:               nō-e-(tō)               swol-O  
               3/ERG           eat-INF-DAT           look/try-PERF/SET2  
               "S/he tried to eat."

Non-Control verbs do not occur as infinitive complements of swo-.

- (28)\*           wō:               lumōn-e-(tō)               swol-O  
               3/ERG           remember-INF-DAT           look/try-PERF/SET2

In the case of lumOn- 'remember,' the affective causative form may be used as a complement since the causative suffix forms a stem with Control verb properties.

- (29)           wō:    lumOn-k-e-(tO)                               swol-O  
               3/ERG remember-CAUSE-INF(-DAT)    look/try-PERF/SET2  
               "S/he tried to recall (it)."

In addition, the verb bi(1)- 'give' occurs with infinitive complements meaning 'let, allow'; it subcategorizes for Control verbs only.

- (30)           wō:               ji-tO               won-e               mO-biu  
               3/ERG               1-DAT               go-INF               NEG-give/IMPERF/SET2  
               "S/he didn't let me go."

- (31)\*           wō:    ji-tO then-e                               mO-biu  
               3/ERG 1-DAT arrive-INF                               NEG-give/IMPERF/SET2

In short, there is nothing odd about saying that the verb te(1)- 'time to/obliged to' takes only Control verb complements. In fact, it follows directly from the semantics of the verb itself. For Newari, the meaning of the verb te(1)- 'time to/obliged to' entails an obligation for self-initiated action. One cannot, for example, be obliged to catch a cold. Note, however, that in English it is possible to interpret 'time for' with non-volitional sentences such as: "It's time for Bozo." This is not the case with Newari te(1)-, suggesting a more basic modality sense 'be obliged' rather than the aspectual sense 'time to.'

The semantics of a negative imperative form of the verb supports the the modality interpretation. Jorgenson (1931; 1941) and Manandhar (1986:97) note the polysemy of te(1)- 'time to/obliged to,' and the prohibitive construction mO-te 'do not.' The prohibitive construction is constructed out of the negative

imperative form of the verb te(l)- 'time to/obliged to.'<sup>4</sup> Since prohibition entails potential self-initiated action, the prohibitive construction only occurs with infinitive Control verb complements.<sup>5</sup>

- (32)            won-e            mO-te  
                go-INF        NEG-be.obliged  
                "Do not go!"
- (33)            nO-e            mO-te  
                eat-INF        NEG-be.obliged  
                "Do not eat (it)!"
- (34)\*           then-e            mO-te  
                arrive-INF        NEG-obliged

The affective causative form allows some Non-Control verbs to occur with the prohibitive construction.

- (35)           lwomOn-k-e            mO-te  
                forget-CAUSE-INF        NEG-be.obliged  
                "Don't forget"

Thus, the subcategorization requirements of the verb te(l)- can be explained if the semantics are assumed to be primarily based on modality rather than temporality. In perfective affirmative clauses, the verb has the basic meaning: 'to become obligated to initiate an action based on a self-judgement (epistemic interpretation) or other-judgement (deontic interpretation).' The prohibitive construction is a negative imperative form meaning 'obligated not to act.'<sup>6</sup> The semantics of 'obligation' entail potential intentional action; hence, the verb may only occur with Control verb complements.

In affirmative clauses, the verb te(l)- has two potential interpretations: epistemic and deontic. The interpretations follow from the principles of discourse role and epistemic source.

First, recall the two domains in the conceptual structure of intentional action: mental representation and self-initiated force. The meaning of te(1)- entails potential self-initiated force for the complement clause. The epistemic interpretations occur only when the actor in the clause is coreferential with the epistemic source discourse role.

In these cases, the individual who is attributed or assumes the discourse role of epistemic source is the only person who has authority to judge: 'the time has arrived.' In this sense, the epistemic interpretation, like SET1 inflection follows from evidential/logophoric principle of privileged access to mental states.

In contrast, the deontic interpretation occurs whenever the actor and epistemic source are not coreferential. In making an assertion about obligation, the judgement will always be located with the epistemic source. By implication, if the epistemic source is not the actor, the obligation to act will be attributed to the actor by the epistemic source, giving a deontic interpretation of the utterance.

The verb te(1)- represents the concept 'time to/obliged to'; schematically, the concept of obligation entails two things:

1. There is a potential for self-initiated action by an individual.

2. An individual makes a judgement (based on individual, social, or moral criteria) that a self-initiated action has become necessary.

[ Judge [ Obligation [ Initiate [ Event ] ] ] ]

The mapping from schematic structure onto the grammar is diagrammed below:

If the epistemic source and the actor are co-referential, there is an epistemic interpretation:

[ x<sub>i</sub> Judge [ Obligation [x<sub>i</sub> Initiate [ Event ] ] ] ]  
 {ES<sub>i</sub>} [ x<sub>i</sub> [ x<sub>i</sub> INITIATE+VERB ] te ]

If the epistemic source and the actor are not co-referential, there is a deontic interpretation:

[ x<sub>j</sub> Judge [ Obligation [x<sub>i</sub> Initiate [ Event ] ] ] ]  
 {ES<sub>j</sub>} [ x<sub>i</sub> [ x<sub>i</sub> INITIATE+VERB ] te ]

In summary, te(1)- 'time to/obliged to' takes infinitive Control verb complements and SET2 inflection. In this sense, its subcategorizing and lexical semantic properties are distinct from ten- 'get ready/be ready.' Despite this clear difference, both verbs exhibit distributional asymmetries which are a function of the same conceptual and discourse principles underlying inflection in simple clauses. With te(1)-, the epistemic interpretation occurs whenever: (a) the complement verb is a Control verb, (b) the discourse role of epistemic source is coreferential with the actor.

Since the verb te(1)- requires Control verb complements, the deontic interpretation occurs in all other contexts where the actor and Epistemic Source are not coreferential. In short, the discourse evidential principle by which actor and Epistemic Source are co-indexed is manifested independently of the inflectional contrast.



dhun- 'finish/be finished'

Chapter VI described the distribution and interpretation of the causative suffix -kOl-/-k- and identified two types of causatives: effective and affective. In addition to these two types, there is an exceptional use of the causative suffix with the aspectual verb dhun- 'finish/be.finished.' As with te(l)- 'time to/obliged to,' the distribution of dhun- 'finish/be.finished' shows that the conceptual and discourse principles can be distinguished from the formal realization in SET1/SET2 inflection.

The verb dhun- takes infinitive complements and, like te(l)- 'time to/obliged to,' categorially takes SET2 inflection. In a first person declarative clause with a Control verb complement, the simple form of the verb occurs with SET2 inflection.

- (36)           ji               won-e           dhun-O  
               1/ABS           go-INF       finish-PERF/SET2  
               "I already went."

However, in declarative clauses with second and third persons, the causative SET2 form is obligatory. Both the simple form and the causative SET1 form are ungrammatical. For example:

- (37)           chO               won-e           dhun-kOl-O  
               2/ABS           go-INF       finish-CAUS-PERF/SET2  
               "You already went."
- (38)\*           chO               won-e           dhun-O  
               2/ABS           go-INF       finish-PERF/SET2
- (39)\*           chO               won-e           dhun-k-a  
               2/ABS           go-INF       finish-CAUSE-PST/SET1
- (40)           wo               won-e           dhun-kOl-O  
               3/ABS           go-INF       finish-CAUS-PERF/SET2  
               "S/he already left."

In fact, the distribution of causative and simple forms of the verb dhun- exactly parallels the SET1/SET2 inflectional distribution. For example, second person questions require the simple form.

- (41)            chO            won-e            dhun-O            la  
                  2/ABS            go-INF            finish-PERF            Q  
                  "Have you already gone?"

Third person questions require the causative form.

- (42)            wo            won-e            dhun-kOl-O            la  
                  3/ABS            go-INF            finish-CAUS-PERF/SET2            Q  
                  "Has he already gone?"

Logophoric contexts take the simple form.

- (43)            wō:    nO-e            dhun-O            hō  
                  3/ERG eat-INF            finish-PERF/SET2            EVD  
                  "S/he<sub>i</sub> said s/he has already eaten."

Unlike te(l)- 'time to/obliged to,' dhun- allows both Control and Non-Control verb complements. When the complement verb is a Non-Control verb, the SET2 causative form must be used. The form dhun-O is unacceptable in these cases.

- (44)            ji-to            tyanu-e            dhun-kOl-O  
                  1-DAT            be.tired            finish-CAUS-PERF/SET2  
                  "I'm already tired."
- (45)\*            ji-to            tyanu-e            dhun-O  
                  1-DAT            be.tired            finish-PERF/SET2

The simple vs. causative alternation parallels the SET1/SET2 opposition with the verb ten- 'get ready/be ready' and the epistemic/deontic opposition with te(l)- 'time to/obliged to.'

In summary, dhun- takes infinitive complements and only allows SET2 inflection. It inflects with the simple SET2 form whenever: (a) the complement verb is a Control verb, (b) the self-initiated action is in accordance with a representation,

(c) the discourse role of epistemic source is coreferential with the actor.

The SET2 causative form occurs in all other contexts.

There are other important facts to note about dhun-.

Although the actual distribution of simple and causative forms with dhun- is distinct from the affective causative verbs, in one sense, dhun- is like an affective causative verb (see Chapter VI). More specifically, in forming the causative, the suffix -kOl- does not require an added argument; there is no increase in valency. Independent of the other parameters of self-initiated force in the complement clauses and Epistemic Source, the lexical structure of the simple vs. causative form parallels the affective causative verbs.

dhun- [ ( ) [ x [ VP-INF ] ] dhun ]

dhun-CAUSE- [ x [ [ VP-INF ] ] dhun-CAUSE ]

Clearly, however, the causative morpheme in this construction has exceptional properties. For example, as noted above, the causative suffix with dhun- does not require an Ergative marked nominal. Thus, despite the presence of the causative morpheme, Ergative case marking is impossible.

(46)        wo   /\* wɔ:        won-e        dhun-kOl-O  
             3ABS /\* ERG        go-INF        finish-CAUS-PERF/SET2  
             "S/he already went."

(47)        ji   /\* jɪ:        bura ju-e        dhun-kOl-O  
             1ABS/\* ERG        old become-INF        finish-CAUS-PERF/SET2  
             "I'm already old."

Finally, and most important for our purposes, unlike the affective verbs, the distribution of the simple vs. causative alternation is a function of the same conceptual and discourse

principle affecting the SET1/SET2 alternation. In fact, this is somewhat puzzling.

I can not, at this time, adequately explain the development of this exceptional occurrence of the causative form with dhun-, though the evidence suggests an extension of the causative meaning into evidential domains. For example, there is another modality verb taking infinitive complements masti wo(l)- 'desire come.'

- (48)           ji(-tO)       won-e       masti wol-O  
               1(-DAT)       go-INF       desire come-PERF/SET2  
               "I'd like to go."

Several of my consultants suggested that it was odd or inappropriate to use this verb in non-epistemic source contexts, unless there are appropriate evidential qualifications. Thus:

- (49)??       wo-ya(tO)       won-e       masti wol-O  
               3-GEN(DAT)       go-INF       desire come-PERF/SET2
- (50)       wo-ya(tO)       won-e       masti wol-O       hō  
               1-GEN(DAT)       go-INF       desire come-PERF/SET2 EVD  
               "S/he<sub>i</sub> said s/he<sub>i</sub> would like to go."

Among the speakers who felt that the simple clause with masti wo(l)- was odd or inappropriate in non-epistemic source contexts, some suggested an affective causative construction would be appropriate. In this case, however, the causative is interpreted as: 'apparent to observation.'

- (51)       wō:       won-e       masti woe-kOl-O  
               3-ERG go-INF       desire come-CAUSE-PERF/SET2  
               "(S/he has indicated) s/he would like to go."

The interpretation of the affective causative as 'apparent to observation' occurs with certain Dative affective verbs. For example, the causative form of the verb 'be.cold' ciku- / cikui- k- is interpreted as 'shiver or shake with cold.' This suggests

a pathway for extension of the affective causative meaning into an evidential function.

For example, assuming that the canonical effective causative is basic, the canonical animate causative schema has a referentially distinct source/agent and goal/patient as follows:

[ x Represent [ x Initiate [ x Cause [ y Become ] ] ] ]

In the affective causative schema the source/agent and goal/patient roles are not referentially distinct. Thus, the affective causative is interpreted as a type of self-initiated mental or sensory/emotional event:

[ x Represent [ x Initiate [ x Cause [ x Become ] ] ] ]

To the extent that these experiencer events are not accessible to others, they may only be inferred via behavior. As was the case with the affective causative ciku- 'be.cold' / cikui-k- 'shiver/shake with cold,' the internal state and the observable behavior are linked by an affective derivation.

If we follow this reasoning, then the evidential function of the causative with dhun- 'finish/be.finished' follows from several further assumptions:

1. In one sense, 'finish/complete' describes an internal mental event inaccessible to observation by others. As opposed to a concept like 'stop,' the concept 'finish/complete' entails a mental plan of the event that enables a judgement to be made when the event has reached its complete realization. With self-initiated actions, this plan presumably has the same status as the representation with 'intentional action.' It is inaccessible to other minds and subject to evidential restrictions.

1. Since the representation is inaccessible to other minds, in non-epistemic source contexts, the judgement x's action is finished must follow from inference based on observable behavior.

3. The observable behavior is caused behavior. Therefore, the assertion x's action is finished in non-epistemic source contexts requires the attribution of causation. This is in contrast, for example, to assertions about "stopping," where observation is sufficient. It is in this sense that dhun- 'finish/be.finished' is analogous to ciku(1)- 'be.cold.' The affective causative form signifies observable behavior attributed to an internal state.<sup>7</sup>

More problematically, in environments with Non-Control verbs, the causative form is also required. No satisfying non ad hoc account has occurred to me and currently I have identified no clear historical pattern which would suggest a path of development. More important to my argument, however, is the fact that the Non-Control verb environment has the same formal (causative) realization as non-epistemic source contexts. The distribution of the simple vs. causative forms of dhun- is formally distinct but functionally parallel with the SET1/SET2 opposition.

#### Summary: Formal Distinctions and Function Parallels

##### Formal Distinctions

The distributional properties of the verbs can be distinguished in terms of (a) inflectional properties, and (b)

subcategorization properties. As with simple verbs, the inflectional properties of each verb are determined, in part, by whether or not the feature [INITIATE] is part of the lexical meaning. The subcategorization properties of the three verbs are a function of the aspect/modality semantics which determine which complement types are compatible with their meaning. The distinctions are summarized below:

The verb ten- 'be ready/get ready' inflects exactly like a Fluid verb and has no restrictions on its complement types:

ten-                    [ x [ x INITIATE+VERB ] (INITIATE)ten ]  
                          [ x [ x INITIATE+VERB ] ( )ten ]  
                          [ x [ x VERB ] ( )ten ]

The verb te(l)- 'time to/obliged to' inflects exactly like a Non-Control verb and allows only Control complement types:

te(l)-                    [ x [ x INITIATE+VERB ] te ]

The verb dhun- 'finish/be.finished' is more problematic. In contexts which require the simple, non-causative form, the verb inflects as a Non-Control verb. In the contrast between simple and causative, it inflects like an affective causative, adding no new arguments to the causative form. Since the causative form occurs in exactly those environments where SET2 is used with Control verbs, the causative stem will always occur with SET2 inflection. It has no restrictions on complement types:

dhun-                    [ ( ) [ x INITIATE+VERB ] dhun ]  
dhun-CAUSE-            [ x [ [ x VERB ] dhun-CAUSE ]  
dhun-CAUSE-            [ x [ [ x INITIATE+VERB ] dhun-CAUSE ]

## Functional Parallels

Although the three verbs have different formal properties, there is a functional parallel among the three complement taking aspect/modality verbs. The distribution of SET1 with ten- 'get ready/be ready,' the epistemic interpretation with te(1)- 'time to/obliged to,' and the simple SET2 form with dhun- 'finish/be.finished' all exhibit the same necessary conditions: (a) the complement verb has self-initiated force as part of its (obligatory or potential) lexical structure, (b) the discourse role of epistemic source is coreferential with the actor, (c) the default forms occur whenever one of the above parameters is absent.



### Notes

<sup>1</sup>The infinitive form -e is homophonous with the SET1 Non-Past form.

<sup>2</sup>The suffix -gu functions as a nominalizer, occurring in conversational contexts to indicate a variety of pragmatic functions including presupposition, background, low assertiveness, and politeness. The temporal subordinating suffix -bOlOe 'when' triggers the same inflectional distribution as the complementizer -gu. That is, the SET2 Perfective/Imperfective opposition is neutralized; the SET1/SET2 opposition becomes orthogonal to a Past/Non-Past opposition (see Chapter II).

<sup>3</sup>Hargreaves & Tamot (1985) show how the two verbs ten- 'get ready/be ready' and te(l)- 'time to/obliged to' parallel other stem final contrasts, e.g., won- 'go' and wo(l)- 'come', suggesting an earlier morphological role for the stem final -n.

<sup>4</sup>Genetti (1990:170) states that the verb te- which historically formed the prohibitive auxiliary mO-te "is rare or has been lost" in modern Kathmandu Newari, implying that the Modern Kathmandu prohibitive construction mO-te 'do not' and the modal verb te- 'time to/obliged to' are not cognate. The modal verb te- 'time to/obliged to' and the prohibitive construction mO-te 'do not' are both well attested in Late Classical texts and modern colloquial speech. All evidence suggests they are one in the same.

<sup>5</sup>The restriction is not really syntactic since there are constructions with some Non-Control verbs such as: gya-e mO-te 'don't be afraid'. Even though gya- 'be.afraid' is a Non-Control verb, the construction implies a type of control. Note also that the imperative gya! 'be afraid!' is anomalous. The lack of complete concord between prohibitives and imperatives with respect to intentional action and control can be accounted for in terms of the model proposed in Chapter Four. A prohibition implies some potential event. Although the event itself may be the type which does not admit self-initiated force, it may be subordinated to a plan of action which does admit self-initiated force. Thus, 'don't be afraid' implies that the event 'be afraid' is placed within the scope of a plan 'prevent oneself from being afraid'.

<sup>6</sup>On the problem of negative scope for main and complement clauses see Horn (1989). Tuladhar (1990) provides a comprehensive analysis of negation in Newari.

<sup>7</sup>Several speakers have suggested to me that, in fact, some of the affective causative alternations do have evidential interpretations, though I have not been able to document this with any consistency. It remains the task of future research. Moreover, the tendency to use the genitive subject with 3rd person subjects and Dative experiencer verbs suggests some

evidential principles. Again, this issue remains for future research.

## CHAPTER VIII

## CONCLUSION

This study described the relationship between the concept of intentional action, the grammatical organization of the clause, and the dynamics of evidentiality in Kathmandu Newari. In particular, the study focused on the conceptual structure of "intentional action," along with the lexical, morphological, and syntactic reflexes of this notion in situated speech. The study has attempted to:

1. Describe how the concepts of intentionality, agency, and causation in conceptual structure are mapped onto grammatical organization.
2. Describe the interaction or non-interaction among these concepts when they are mapped onto the grammar.

Chapter II examined the distribution of SET1/SET2 inflectional forms and asked the following question:

How do the lexical semantic and the discourse pragmatic domains interact to determine the distribution of inflectional forms and express the distinction between intentional and non-intentional actions?

The distribution of SET1/SET2 inflection results from the interaction of two domains: (a) verb semantics and the interpretation of intentional action, and (b) the speech act participant roles which assume or are attributed the epistemic authority in the discourse interaction.

Chapter II concluded that the distribution of inflectional forms must be described in terms of the interaction between the two lexical semantic and discourse pragmatic principles.

In Chapter III we examined a set of distributional and semantic "tests" to determine which conceptual properties were functionally relevant for determining SET1/SET2 inflection, asking the question:

What properties or features of the concept "intentional action" are functionally relevant in Newari morphosyntax? More generally, what is the conceptual structure by which intentional action is construed in the grammar of Kathmandu Newari?

The distribution of SET1/SET2 inflection with the evidential forms such as hOā 'it's.said,' khOnisa 'it.appears,' and mOcaekO 'unconsciously' showed that one part of the definition of intentional action involved some form of mental representation or awareness. Moreover, it showed that this domain could be obviated by evidential operators independently of the concept of self-initiated force.

In contrast, the distributional evidence for three classes of verbs (Control, Fluid, Non-Control) and the evidence from the use of the pro-forms ya(t)- 'do' and ju(l)- 'become' showed that the second domain of intentional action involved an underlying distinction between self-initiated events and other non-initiated events, "doings" vs. "happenings." Finally, the periphrastic construction for expressing "premeditation" revealed underlying semantic and pragmatic principles for attributing intentional action.

Chapter IV showed that approaches to intentional action in both action theory and cognitive development were consistent with the idea that intentional action can be conceived as:

(a) self-initiated force, (b) in accordance with a unique mental state or plan. Given this distinction between the two parts of conceptual structure, Chapter IV addressed the following question:

When an utterance in discourse indexes an opposition between intentional and non-intentional action, what are the contributions of the lexical (i.e., verb), morphological (i.e., inflection), and pragmatic (i.e., discourse/evidential) information. In other words, what parts of the conceptual structure are mapped onto what parts of the grammar and how do they interact?

Chapter IV argued that the concept of self-initiated force was represented as part of the inherent lexical meaning of Control verbs, was potentially part of the meaning of Fluid verbs, and incompatible with the meaning of Non-Control verbs. Furthermore, the lexical incorporation of the concept 'self-initiated force' was distinguished from the function of SET1 inflectional forms. Although SET1 forms indicate that intentional action is predicated of an individual, it was argued that the occurrence of SET1 inflection entails the force dynamic and indicates that the force was initiated in accordance with the appropriate mental state. Finally, part of the conceptual structure of intentional action included the discourse/evidential principle in which mental representations are inaccessible to other minds; hence, the direct attribution of intentional action with SET1 inflection is determined by the discourse determination of Epistemic Source. In this way, the lexical, inflectional, and discourse pragmatic principles

interact to determine the distribution and interpretation of SET1/SET2 inflectional forms.

Chapter V examined the lexical-semantic properties which underlie the argument structure of verbs and their case assigning properties, posing the following research question:

If intentionality and control are prototypical source/agent properties central to the hierarchical assignment of thematic roles to argument positions, what is the relationship between the concept of intentional action realized by the inflectional opposition and the concepts of source/agent as thematic role concepts? Alternatively, how does the system of inflectional oppositions correlate with other morphosyntactic reflections of argument structure, e.g., case assignment.

Chapter V argued that case assigning properties are a function of a mapping between an underlying Source>Trajector>Goal schema and argument structure, independent of the opposition between intentional and non-intentional action. When mapping conceptual structure onto morphosyntactic structure, the thematic role concept of source/agent is independent of the concept "intentional action." The concept of intentional action was neither a necessary nor sufficient property for determining case assignment in Newari.

The examination of causative structures in Chapter VI revealed a problematic class of non-canonical causatives, the affective causatives. Affective causative formation was restricted to experiencer and cognition verbs and did not increase the valency in the clause; instead, affective causatives were interpreted as active, middle-voice counterparts to the simple non-active experiencer or cognition verbs. In examining these constructions, Chapter VI posed the following question:

What is the relationship in Newari between the syntax and semantics of causatives and the morphosyntactic reflexes of intentional action. More specifically, if causatives do indeed provide evidence for unaccusative lexical structures in Newari, what is the relationship between the concept of intentional action and unaccusative syntax in Newari?

Chapter VI concluded that although affective causatives and Fluid verb alternations both indicate a semantic opposition between self-initiated and non-initiated events, they represent two distinct mapping relations from conceptual structure to the morphosyntax. In short, the concept of self-initiated force which underlies the distinction among the three verb classes (Control, Fluid, Non-Control) is not relevant for the determination of unaccusative grammaticalization in Newari.

In Chapter VII we turned to the domain of aspect/modality, evidentiality, and discourse roles. The distribution of a set of aspect/modality verbs showed that the functional principles underlying the distribution of inflectional forms have realizations in grammatical contexts other than the SET1/SET2 inflectional contrast itself. This raised the following question:

What is the relationship between the concept of intentional action and the expression of aspect/modality distinctions in the clause? More specifically, what is the functional organization which underlies the same distributional asymmetries for the inflectional contrast and a set of aspect/modality verbs?

The form/function asymmetries with the verbs ten- 'get ready/be ready,' te(1)- 'time to/obliged to,' and dhun- 'finish/be finished' showed that these asymmetries exactly parallel the distribution of SET1/SET2 inflection. Accounting for the underlying conceptual structure of intentional action and the functional principles which determine the SET1/SET2

contrast turned out to account for the form/function asymmetries with modality verbs as well. In short, Chapter VII established independent grounds for the validity of the conceptual structures and functional principles which underlie the grammatical realization of the concept "intentional action" in Kathmandu Newari.

#### Implications and Directions for Future Research

One fundamental issue in linguistic theory is the relationship between the conceptual structure of events and the morphosyntactic organization of the clause. Another fundamental issue is the relationship between discourse functions and morphosyntactic organization. The Newari data suggest a re-examination of central concepts in each domain: the event structure concept of "agency" and discourse functional category of "person."

The concept of agency has been identified as having a prominent role in the mapping between semantics and clause level grammar. Fundamental to the concept of agency is the concept of intentional action. However, the Newari data show that the concept of intentional action (or volition) cannot simply be subsumed as a "feature" or "primitive predicate" which characterizes the agent thematic role. In short, the conventional notion of a semantic primitive predicate or feature "volition" associated with the thematic role of agent is inadequate for describing Newari inflection, case, and causativization.



I have suggested that the primary reason why the complexities of "intentional action" have not been looked at in more detail is the lack of data on languages which have surface morphosyntax reflecting a complicated conceptual structure for intentional action. In this respect, the Newari data present an important challenge for any linguistic model which attempts to account for the mapping relations between event structures, thematic roles, and syntax.

For example, as we noted in Chapter IV there has been almost no discussion in the linguistic literature connecting "intention" as a force dynamic concept with "intention" as a propositional attitude concept. With the exception of some suggestive analyses of English (and German) phenomena in the work of Pleines (1976), Jackendoff (1985; 1990), and Talmy (1976), the only explicit analysis I am aware of is DeLancey's analysis of Lhasa Tibetan (1986).

Even cognitive/functional approaches to event structure and clause organization have not seriously investigated the conceptual structure of intentional action. For example, functional models, such as Role and Reference grammar (Foley and Van Valin 1984; Van Valin 1990), do not attempt to analyze the conceptual structure of intentional action, relying instead on the semantic primitive "volition" in predicate decomposition. As we have seen, a simple primitive "volition" is not adequate for describing both domains of intentional action: the force dynamic and evidential logophoric properties of the SET1/SET2 distribution in Newari. It is also not clear how such a theory would handle the related but distinct and non-interacting

conceptual structures which underlie SET1/SET2 inflection, case, and causatives. Role & Reference Grammar is not alone in this respect. Although this has been primarily a descriptive study, the Newari data appear problematic for virtually all current models of thematic roles. What is needed, of course, is a more complete model of the parameters for mapping the concept of intentional action onto grammatical organization.

Even in work as recent as Croft (1991), we find statements such as the following, which suggest the model of volitionality in which the "mind" drags the "body" out of bed:

The theory of volitional action appears to be quite-simple...the commonsense model requires a mind-body distinction...a relation between a volitional entity and that entity's body (or part thereof). The VOL[itional] link translates will (intention) into physical force (1991:171).

In every other respect, Croft's analysis of the relationship between the conceptual structure of events and the grammatical organization of clauses is comprehensive and insightful. Virtually all of the conceptual modeling in his book is compatible with this study, drawing on the same insights from the cognitive/functionalist tradition. However, the Newari data reveal a complex concept "intentional action" which maps onto different parts of the grammar. A simple feature of "volition" is insufficient to account for the various mapping relations.

In challenging simplistic notions of "intention/volition," the Newari data also reveal the important connection between agency, intentional action, and logophoricity. For example, work on long-distance reflexives in languages such as Icelandic, Japanese, Korean, and Mandarin suggest that the concept of

intentional action can be a semantic parameter underlying potential long-distance antecedent/anaphor relations (cf. Kuno 1987; Maling and Zaenen 1990; Sells 1987; Zubin, Chun, & Li 1990). The data from these languages suggest that where some notion of intentional action is necessary to capture some of the logophoric properties of long-distance reflexives, the Newari data provide a useful model for how this might be conceived.

Finally, the Newari data suggest that the discourse role of "epistemic source" may play a more important part in mapping between discourse structures and the grammar than has been previously noted. Although there has been some previous discussion of the evidential and pragmatic similarities of first person declarative and second person interrogative clauses, the Newari data reveal that as a function of face to face interaction and information exchange, epistemic source can become a grammaticalized category. In this sense, the Newari data reveal an unusual manifestation of the more familiar discourse functional categories of "person" and "agreement" (cf. Ebert 1987; DeLancey 1989; Silverstein 1976b; Thompson & Mulac to appear). The degree to which the "Newari-type" inflectional paradigm is typologically unique remains to be seen.

In conclusion, the Newari data do not admit a primitive predicate or feature approach to volition/intention. Instead, the Newari data require that we recognize a complex conceptual structure for "intentional action." On the one hand, the concept of self-initiated action is part of force dynamics, agency and causation. On the other hand, the concept of intentional action is part of the domain of propositional attitudes,

evidentiality, and discourse interaction. A complete account of Newari SET1/SET2 inflections also entails the constraint the mental representation of a plan-in-action can only be directly attributed to individuals in certain contexts of situated speech. In other words, in mapping between conceptual structure and the grammar, the notion of intentional action must be considered in its social/cognitive dimension as well as its perceptual/cognitive dimension. The Newari data show that we must seek integrative models of the mapping relations between conceptual structures, discourse functions, and morphosyntactic organization.

## APPENDIX

## LIST OF ABBREVIATIONS

ABL	ablative
ABS	absolute
ATR	attributive
CAUS	causative
CL	classifier
COMP	complementizer
DAT	dative
ERG	ergative
EVD	reported speech evidential
GEN	genitive
IMP	imperative
IMPERF	imperfective
INF	infinitive
INST	instrumental
LOC	locative
NEG	negative
NOM	nominalizer
NPST	non-past
PERF	perfective
PST	past
Q	question particle
SRC	animate locative/source

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